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GAMING NONREDUCTION MEASURES (NoREDs) FOR CONVENTIONAL ARMED FORCES IN EUROPE (CFE)

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The NoREDs Study at CAA was designed to assess whatever additional contribution such measures might make to security and stability in Europe. To simulate the dynamic political-military environment in which NoREDs would operate, the study employed CAA's Contingency Force Analysis Wargame (CFAW) in conjunction with a more traditional political-military gaming framework. A Blue Team representing NATO and a Red Team representing the USSR used NoREDs to help manage relationships between them during peacetime, in a crisis, and on the eve of a potential conflict. CFAW furnished most of the information and intelligence-gathering tools available to both teams (e.g., simulated air and ground inspection capabilities).

The first NoREDs game was played at CAA in May 1990. Initial results tended to suggest that:

- As proposed, NoREDs worked reasonably well (almost as intended) to promote compliance with a CFE treaty during peacetime and crisis;
- Currently proposed NoREDs may not work quite as well when it comes to providing early warning of large-scale offensive action by surprise;
- CFAW provides a useful, dynamic, and realistic facility for studying the potential effects of NoREDs.

GAMING NONREDUCTION MEASURES (NoREDs) FOR CONVENTIONAL ARMED FORCES IN EUROPE (CFE)

November 1990

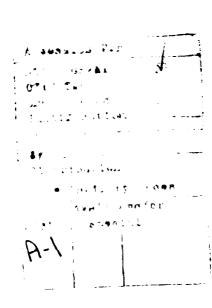
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SUMMARY

"NoREDs" stands for nonreduction measures. Such measures were proposed to accompany reductions of Conventional Armed Forces in Europe (CFE) as part of the arms control treaty being negotiated between North Atlantic Treaty Organization (NATO) and Warsaw Pact member states in Vienna, Austria. NoREDs proposed by NATO for CFE originally included:

- Exchanges of information
 - --e.g., on treaty-limited equipment remaining after force reductions;
- Stabilizing measures
 - --e.q., notification of reserve callups, 42 days in advance;
- Verification measures
 - --e.q., on-site ground and aerial inspections.

Other, similar measures have existed in and for Europe since the Confidence Building Measures (CBMs) adopted in the Helsinki Final Act of 1975. The list of related measures also includes the Confidence and Security Building Measures (CSBMs) mandated by the Stockholm Document of 1986—e.g., notification 42 days in advance of coordinated military exercises involving 13,000 troops or 300 battle tanks.

Purpose

The purpose of the NoREDs Study at the US Army Concepts Analysis Agency (CAA) was to assess the particular contribution that nonreduction measures might make to stability and security in Europe, twin goals of the CFE negotiations. CFE seeks to promote such goals primarily through force reductions to parity between NATO and the Warsaw Pact in treaty-limited items of equipment. Once these reductions have occurred, however, large standing forces are still eligible to remain in Europe on both sides of the former east-west divide.

In the political-military environment produced by CFE reductions, nonreduction measures will be expected to ensure continued compliance with the spirit as well as the letter of the CFE treaty and to provide early indications not only of potential violations but also of impending hostilities. Thus, the overarching policy research question is: can these NoREDs be counted on to fulfill such expectations? In practice, this question translates into two others, one substantive, the other methodological:

- Substantively, how is the overall NoREDs regime likely to work in practice following CFE reductions?
- Methodologically, can a realistic, dynamic environment be developed to help answer the substantive question?

Hypotheses

To address the substantive question, this study posed three hypotheses:

- In peacetime, NoREDs will operate as intended to indicate compliance and nonhostile intent.
- In a crisis, NoREDs will signal nonhostile intent effectively when that is the case.
- In a crisis, NoREDs will help deter or unmask deception if one side is considering a surprise attack or large-scale offensive.

Methodology

To address the methodological question, the study employed CAA's Contingency Force Analysis Wargame (CFAW) in combination with a more traditional political-military gaming framework. A Blue Team representing NATO and a Red Team representing the USSR used NoREDs to help manage relationships between them during peacetime, in a crisis, and on the eve of a potential conflict.

CFAW furnished most of the information and intelligence-gathering tools available to both teams (e.g., simulated air and ground inspection capabilities). In addition, CFAW served as a kind of automated game board for the study. It provided:

- A map of Europe from the Atlantic to the Urals divided into hexagons with sides 30 miles long and a center-to-center distance of 50 miles:
- Representation of Red and Blue units down to brigade and regiment levels for all CFE participants;
- Time and distance calculators for simulating movement of units throughout Europe.
- Terrain features that affect unit mobility rates across and between hexagons:
- Day, night, and weather variables.

Results.

The NoREDs game took place at CAA during May 1990. It consisted of five moves by both teams over 5 days and during different peacetime and crisis conditions. The objective was to test the hypotheses noted above. With regard to those hypotheses, the game suggested that, as originally proposed:

- NoREDs can work reasonably well (almost as intended) to promote compliance with a CFE treaty during peacetime and in some crisis situations—e.g., when neither side intends to attack.
- NoREDs may not work quite as well when it comes to providing early warning of large-scale offensive action by surprise.

The game also suggested that CFAW is fully capable of providing a useful, dynamic, and realistic facility for studying the potential effects of NoREDs.

As for the NoREDs themselves, the study concluded with the following observations or insights derived from the game:

- Quotas for inspections and the distances involved in eastern Europe and the USSR will quickly force tradeoffs between the different types of inspection options available.
 - --Aerial inspections could prove the best all-around compromise choice among the different options.
- Proposed thresholds for notification of significant military activities (≤ two brigades/regiments) may be too high.
 - --At parity in CFE, new thresholds at lower levels may be justified by shrinking overall force levels and fewer exercises.
- The movement provision originally proposed by NATO as a CFE stabilizing measure could be improved.
 - --Some further definition of what constitutes a movement (e.g., the Stockholm Document's concept of a "concentration" of force) may be required.
- Credible east-west European conflict scenarios are difficult to generate at present.
 - --Nevertheless, it is important to try, since there are no guarantees that the future will be as rosy as the present (and much past history to suggest otherwise).

Postscript

On 19 November 1990, a CFE treaty was signed in Paris by leaders of the 16 NATO and 6 Warsaw Pact member states who negotiated it. An information-exchange measure and some verification provisions were included in the treaty. Aerial inspections were not present among the agreed verification provisions, however, nor were most of the stabilizing measures that had been proposed—e.g., provisions for notification to the other treaty signatories, well in advance, of reserve callups, the movement of treaty—limited equipment, and large—scale exercises. A follow—on negotiation, dubbed CFE—Ia to distinguish it from its predecessor, got under way immediately in Vienna to address such unresolved issues as the potential addition of military personnel limits to the agreement and, presumably, the absence of many original NoREDs proposals from it.

CONTENTS

SECTION		Page
I	INTRODUCTION	1
II	GAME ORGANIZATION	5
Ш	INITIAL GAME MOVES	. 18
IV	LATER GAME MOVES	. 27
V	THE FIFTH AND LAST MOVE	. 39
ΙV	CONCLUDING OBSERVATIONS	. 50
APPENDIX		
A B C D E F G H I J K	Study Contributors Scope of Reductions - NATO Proposals as of May 1990 NoREDs Game Plan NoREDs Player Information Briefing (Move I) NoREDs Move II Instructional Briefing NoREDs Move III Update Briefing NoREDs Move IV Scenario and Instructions NoREDs Move V Update and Instructions Original Red Move V Bibliography Distribution	. B-1 . C-1 . D-1 . E-1 . F-1 . G-1 . H-1 . I-1
	FIGURES	
FIGURE		
2 3 4	CFAW Map of ATTU Region for CFE Showing Hexagons Intelligence Tools in CFAW for Monitoring NoREDs	. 12 . 13 . 28 . 44
	TABLES	
TABLE		
1 2	NoREDs Featured in the May 1990 Game at CAA	8

GAMING NONREDUCTION MEASURES (NOREDs) FOR CONVENTIONAL ARMED FORCES IN EUROPE

Section I. INTRODUCTION

In May 1990, as this research study was coming to a head, negotiations between NATO and the Warsaw Pact on reducing their conventional armed forces in Europe seemed well on their way toward reaching an historic agreement before the end of 1990 or soon thereafter. That agreement should ultimately produce throughout Europe, from the Atlantic to the Urals (ATTU), numerical parity and lower force levels for both sides in various treaty-limited items--e.g., tanks, armored fighting vehicles, artillery, aircraft, and helicopters. East-west parity in the quantities of such weaponry available to each side, it is believed, will guarantee stability and security throughout Europe for a long time to come.

Such an agreement on Conventional Armed Forces in Europe (CFE) will become a monument in the field of "structural" arms control efforts. These efforts seek to promote or enhance security and stability by cutting force levels—by directing that items of equipment, personnel, or units be removed or reduced from the force structures of parties involved in the agreement and, if necessary, destroyed. Over the past several years, extensive analytic efforts have been devoted to understanding how structural arms control proposals for reducing and limiting force levels via a CFE treaty are likely to work in practice. As a result, there is a broad consensus in the West, at least, that agreement on NATO's structural proposals for CFE would contribute positively and directly to the original, mutually agreed objectives of the negotiations:

To strengthen stability and security in Europe through

- Establishment of a stable and secure balance of conventional armed forces, which include conventional armaments and equipment, at lower levels;
- Elimination of disparities prejudicial to stability and security;
- Elimination, as a matter of priority, of the capability for

 launching a surprise attack,
 - --initiating large-scale ofiensive action.*

The CFE agreement, however, will contain more than simply structural arms control provisions for reducing and limiting force levels. Based on both Eastern and Western proposals to date, we know that it is expected to include measures for exchanging information, for promoting military activity patterns conducive to stability, and for verifying compliance with the overall agreement. Such measures are not "structural" in the above sense of the term but, rather, "operational" in their scope and in their effects. They deal less with setting the size of forces—i.e., with the levels at which forces ought to be, in what categories, to ensure security and stability—than with what the various forces, at whatever agreed levels, can do. They seek to

^{*}US Information Agency, "CSCE: A Framework for Europe's Future" (Washington, DC, 1989), p 44.

regulate, in other words, how a given set of forces, as well as any arms control provisions for monitoring force levels or structure, is supposed to operate. The term "operational arms control" generally identifies these types of measures.

Although a great deal of effort has been devoted to understanding the force structure implications of CFE, as noted above, comparable levels of analysis have been lacking on the operational side of that arms control enterprise. This is the case despite the fact that, once reductions have occurred, operational measures will comprise most of what is left to be implemented (on a continuing basis) in the arms control agreement. In part, the relative lack of analytical effort devoted to the operational aspects of CFE may be because it is more difficult to quantify the issues involved in operational arms control. Put another way, the problem may be that he tools we have available for analysis lend themselves more readily to structural arms control issues because those issues are more inherently quantifiable.

It is also the case, however, that most of the research effort in arms control has been focused on structural measures as a matter of policy, not simply because of the availability of analytic tools. The most important thing is actually to reduce the forces, it is argued. Reduced forces are harder to reconstitute than operational arms control measures are to violate.

The bottom line remains the same, however. There are too few tools available to analyze operational measures, and the measures themselves are not easily adaptable to the tools that do exist.

This paper is an attempt to help rectify the imbalance. It derives from and reports on a research study begun at the US Army Concepts Analysis Agency in the fall of 1989, shortly after the NATO allies publicly tabled their operational arms control proposals at the CFE negotiations in Vienna, Austria. The paper addresses itself to the potential contribution that the measures contained in these NATO proposals might make to the CFE objectives quoted above. In general, the paper seeks to explore such questions as: what additional or marginal contribution can such measures make to the stability and security benefits afforded by proposed force structure reductions? Because they might increase the useful warning time that a defender has available, are these operational measures likely to become even more important than CFE's structural provisions once an agreement has been implemented? How are the measures likely to function during a transition from peacetime to a developing crisis, or through further escalation into a potential conflict?

More specifically, the research reported in this paper sought to understand how operational arms control measures of the kind NATO has proposed for CFE are likely to work in practice, especially when superimposed upon a realistic, dynamic, political-military environment that includes structural arms control provisions and other operational measures as well. Confidence and Security Building Measures (CSBMs) agreed upon in the Stockholm Document of 1986, for example, will still be operating in this environment, most likely in enhanced form as a result of the parallel negotiations to improve them that were taking place along with the CFE talks in Vienna. It is also possible that an Open Skies aerial inspection regime, which is being negotiated concurrently but separately by the CFE participants in response to

President George Bush's initiative of May 12, 1989 (a revival of President Eisenhower's 1955 proposal for reciprocal reconnaissance flights over the US, the USSR, and their European allies), will add an operational complement to CFE's particular combination of operational and structural measures. The scope of this paper, therefore, is broader than the context provided by CFE alone.

To distinguish between the two basic types of measure for study purposes, the term "nonreduction measures" (NoREDs) was used to denote all of the operational measures involved and to name the study itself. In the vernacular of CFE, "reductions" is the term most often heard when discussions of structural arms control take place. It seemed simpler and potentially less confusing, therefore, to differentiate between measures in terms of that vernacular—i.e., to refer to reductions, on the one hand, and nonreduction measures, on the other. From this point on, the paper abandons any effort to substitute, overlay, or otherwise maintain the (equally appropriate) structural/operational terminology.

In order to address the substantive questions at issue here, the study had first to develop and test a methodology for providing the realistic, dynamic environment in which individual nonreduction measures, as well as various combinations of them, could be explored. Given the lack, noted above, of analytical tools appropriate to nonreduction measures, the available choices seemed limited, almost nonexistent. Many established analytical models centered around combat, for example, whereas this study focused on precombat situations. Nevertheless, political-military gaming appeared to be one promising tool. The interactive aspects of gaming—the competitive involvement of knowledgeable team players on different sides, the ability to develop and change scenarios over time, the responses of teams to each other's moves as well as to the scenarios—promised much of the dynamism required and even some of the realism.*

For additional realism, the study team adapted the Contingency Force Analysis Wargame (CFAW), which already resided in house at CAA, to the task at hand. CFAW could supply automated data bases, geographic displays, time, distance, and terrain features, recordkeeping facilities, and simulated intelligence capabilities. These features could enhance the fidelity of a political-military game to the complex real-world conditions involved, particularly in an arms control regime covering the conventional forces of NATO and the Warsaw Pact from the Atlantic to the Urals. Further details of what CFAW contributed to the gaming methodology are described in Section II.

^{*}For a similar use of political-military gaming to study nonreduction measures from the Stockholm Document, see James P. Kahan, et al., <u>Testing the Effects of Confidence and Security Building Measures in a Crisis: Two Political-Military Games</u> (Santa Monica, CA: the RAND Corporation, R-3517-USDP, 1987).

A NoREDs political-military game utilizing CFAW was tested at CAA in early May 1990. The game consisted of five moves each by two different teams spread over 5 working days, starting on May 3 and running through May 9. For the test game, personnel from CAA augmented by a researcher from the RAND Corporation made up the playing teams. One week later, after lessons learned from the test had been incorporated in the game structure, another game was played at CAA that ran from May 17 through May 23. Players for this game were drawn from representatives of the interagency community in Washington that concerns itself with CFE issues. Further details of team composition are also given in Section II.

This research paper, therefore, reports on the process underlying, as well as the results of, initial attempts at CAA to game operational arms control measures—i.e., nonreduction measures (NoREDs)—in a CFE context and environment. Section II explains how the game was organized and what hypotheses, assumptions, playing arrangements, and technical mechanisms (primarily, those involving CFAW) lay behind it. Sections III and IV describe how the game was played, with Section III focusing on initial game moves and Section IV dealing with the later stages. Section V includes results, observations, insights, and impressions of the game as played at CAA during May 1990.

It is important to note the date of the NoREDs game. At the time the game was played, measures were still being negotiated that never made it into the CFE treaty signed on November 19, 1991 in Paris. In particular, all of the stabilizing measures found listed below on page 8 failed to be included in the final agreement. Moreover, among the verification measures listed on page 8, the aerial inspection measure was deferred to future negotiations, a concept involving "objects of verification" was added to the provisions for ground inspections, and the formula for calculating inspection quotas was no longer based on the assumptions presented below. In retrospect, therefore, the NoREDs game at CAA in May 1990 explored a more robust package of measures than those ultimately included in the CFE treaty. If nothing else, the game and its results now represent a kind of "best case" for such measures in CFE.

Section II. GAME ORGANIZATION

The general purpose for which the NoREDs game was constructed and played is discussed above in Section I. In essence, that purpose was to discover how the overall NoREDs regime is likely to operate in practice, in a dynamic political-military setting, and in crisis as well as peacetime conditions. The overall regime included the measures proposed by NATO for CFE, the CSBMs to which all NATO and Warsaw Pact members are bound to adhere by the Stockholm Document, and any Open Skies/aerial inspection measures to be adopted in the not-too-distant future. A more specific purpose of the NoREDs game was to test three hypotheses about the way such measures will work in various peacetime and crisis situations.

A. Hypotheses

- The first of these hypotheses is that, in peacetime, the nonreduction measures being proposed by NATO for CFE will operate effectively, as intended, to monitor compliance with the overall arms control agreement, to confirm the absence of hostile intent by any of the parties, and to detect or help interpret any aberrations or anomalies that may occur. This hypothesis is simply another way of putting what the authors of nonreduction measures, in CFE at least, seem to have had in mind for them in the first place. The intent, after all, is to construct an arms control regime for Europe that will not only maintain stability and security but enhance them and, in the process, guarantee peace indefinitely. Presumably, the NoREDs proposed in CFE would contribute directly toward that goal; that is why they were being proposed; hence, the hypothesis: they will perform in peacetime as intended.
- The second hypothesis is that, if a crisis should develop in Europe, the nonreduction measures in CFE will help to contain it and prevent further escalation. In this context, the fear seems to be that misunderstanding or miscalculation could lead to a situation in which events spiral out of control, and a crisis mushrooms into a conflict that neither side originally intended. The hope for nonreduction measures is that they will serve to dampen escalatory pressures by providing established, trustworthy devices for confirming that an opponent's actions are nonhostile and limited, when that is the case, as well as for signaling the opponent that one's own actions and intentions are of the same kind. Like the first hypothesis, this second one derives from the overall objective of making Europe more stable and secure via a CFE agreement. It asserts that, if the peace is threatened in Europe by a crisis, CFE's nonreduction measures will help to defuse it.
- The third hypothesis to be tested in the NoREDs game derives from the CFE objective that aims at elimination of the capability to launch a surprise attack or conduct large-scale offensive actions. Nonreduction measures are also supposed to help meet this objective by providing early warning indicators that one or more parties to the CFE agreement is attempting to build such a capability surreptitiously. Information exchange and stabilizing measures, for example, define norms of force levels and military activities with which verification measures can work to establish judgments about compliance and noncompliance with the agreement. The third hypothesis, therefore, is that such nonreduction measures will help deter, or unmask in timely fashion, any deception being employed to prepare a surprise attack or large-scale offensive.

B. Assumptions

Several sets of assumptions underlay the NoREDs game conducted in May 1990. These included assumptions about the scenario and the crises that developed during the game, about the identity of the different teams and players, about the formulation of specific nonreduction measures, and about the ways in which a great variety of data was fed into CFAW for use by the players as the game progressed. Each of these sets of assumptions is elaborated in turn below.

Scenario Assumptions:

The scenario assumed that a CFE treaty, based on NATO's proposals for reductions and for nonreduction measures, had been completed and signed by January 1991. The treaty mandated that force reductions to parity in treaty-limited items should be completed by December 1993. Both sides were assumed to be in compliance with these treaty provisions by the time the first move of the game began in November 1993. At Appendix B is a chart depicting the scope of reductions that NATO was pursuing at game time, in May 1990; at the start of the game, both teams were told that this chart represented the treaty-agreed reductions in CFE.

Unification of the former eastern German Democratic Republic (GDR) with the western Federal Republic of Germany was considered to have been achieved by 1992. The new united Germany remained in NATO, according to the scenario, although no NATO forces were to be permitted in former GDR territory.

The game began in November 1993 with the Soviet Union announcing that it would withdraw its remaining forces from eastern Germany during 1994 but, in any case, by January 1, 1995. In response to this unilateral Soviet announcement, NATO leaders proclaimed their intent to reciprocate by further reducing or withdrawing their forces, presumably from western Germany.

When the game began, both George Bush and Mikhail Gorbachev were assumed to be occupying the presidential offices of their respective countries. The USSR was still intact as a multinational state, its problems in the Baltics and elsewhere having been temporarily brought under control by the application of military force in some cases. The Warsaw Pact, minus East Germany, had ceased to be a viable military alliance by this time, but it hung together loosely as a "political" alliance; among the non-Soviet members, however, only Poland and Bulgaria expressed much real interest in what was left of the old organization.

In the foregoing as in most other aspects of scenario development, the NoREDs Study subscribed to the theory of political-military gaming that advocates holding constant as much of what is known and familiar to the players as possible. The reason for this is a belief, born of previous gaming experience, that players have more than enough to cope with, given all the other scenario changes generally being thrown at them during a game; they should not have to deal with a slew of gratuitous changes as well.

Two developing crises were presented to the players at the outset of the game. One centered on northern Europe and involved diplomatic clashes between the new Germany and Poland over the rights of ethnic German

minorities in Poland. The other focused on southern Europe, where a disintegrating Yugoslavia gave rise to a host of conflicts as its multinational framework began to come apart. Further details of these scenarios are given below, in discussions of the various game moves that are presented in Sections III, IV, and V.

• Team/Player Assumptions:

Both a Blue and a Red Team played the NoREDs game in May 1990. Blue Team players were told that they represented a NATO international military staff group responsible for planning and coordinating implementation of the CFE agreement among NATO members. Their job was to come up with plans, policies, and procedures in response to scenario developments. These would be recommended to higher-level leaders (on the Control Team) as the game progressed. No such NATO group may actually exist or perform such duties once a CFE treaty regime comes into being. Nevertheless, the concept of such a group served as a useful way of imparting a broad, multinational, and relatively high-level perspective to a team comprised of a small number of players—i.e., three players in the May 1990 game.

The Red Team, which also consisted of three players, was told that it represented a Soviet military planning and implementation group. This group was supposed to report to the highest levels in the Soviet government (played by the Control Team) for final decisionmaking. It was also supposed to coordinate its planning with military counterparts among other Warsaw Pact members (also played by the Control Team). As in the case of the Blue Team, Red Team players were instructed to come up with recommended plans, policies, and procedures in response to scenario developments.

For the main NoREDs game that ran from May 16 through May 23, Blue Team members included one representative each from the Army Staff (DAMO-SSC), from the directorate for Negotiations Policy in the office of the Under Secretary of Defense for Policy, and from the Strategic Concepts and Development Center at the National Defense University. The three Red Team players came from the Army Intelligence Agency (ITAC), the Central Intelligence Agency (SOVA), and the Defense Intelligence Agency (Warsaw Pact forces). On the Control Team for this game were the study director and other CAA personnel from the Agency's Strategy and Plans Directorate—in particular, the Conflict Analysis Center within that directorate—which is responsible for political—military gaming and for CFAW at CAA.

NoREDs Assumptions:

When the NoREDs game was played in May 1990, the CFE negotiations were well underway in Vienna, Austria, but far from having resolved many important issues, including significant details of potential nonreduction measures. Even NATO's proposals for such measures were not always fully formed, at least in terms of how certain measures were intended to operate. Moreover, a separate, 35-nation CSBM negotiation was taking place simultaneously in Vienna to improve upon the CSBMs in the Stockholm Document. Elsewhere in various locales, talks among NATO and Warsaw Pact members aimed at establishing an aerial overflight regime via an Open Skies agreement were going on as well. In order to play a NoREDs game in May, therefore, certain

assumptions had to be made about how these negotiations might turn out and how the resulting package of nonreduction measures might look in the end.

Table 1. NoREDs Featured in the May 1990 Game at CAA

- From the Stockholm Document:
- Annual Calendar of Notifiable Military Activities
- Notification of Military Activities
 - --involving more than 13,000 troops or 300 tanks
 - --involving more than 3,000 amphibious or airborne forces
- Observation of Notified Military Activities
 - --in excess of 17,000 troops (lowered to 13,000 for the game)
- From NATO's CFE Proposals:
- Exchange of information
 - --on formations, units, treaty-limited items, and their locations
 - -- on changes in organizational structure
 - -- on additions of formations or units
 - --on changes of 10 percent or more in treaty-limited items
- Stabilizing Measures:
 - --Notification of reserve callups in excess of 40,000 troops
 - --Notification of movements in excess of 600 tanks, 400 artillery, and 1,200 armored combat vehicles within 14 days.
 - -- Constraint on military activities involving 40,000 troops or 800 tanks
- Verification Measures:
 - --Declared-site Ground Inspection
 - -- Nondeclared-site Ground Inspection
 - --Aerial Inspection
 - --Noninterference with National or Multinational Technical Means

For the CFE negotiations, it was assumed that NATO's original proposal of nonreduction measures in September 1989 had been accepted and that, among other provisions, there would be annual data exchanges every December 15th following entry of the agreement into force. These exchanges would include the forces remaining in the CFE area, their locations, and their holdings of treaty-limited items. The lists being exchanged, which might resemble tables of organization and equipment, would start at the top of national military organizations and extend down to the level of brigades (for NATO nations, primarily) and regiments (for Warsaw Pact states). It was assumed further that the annual exchanges would also include any changes in force structure anticipated for the coming year, as well as a forecast of any significant military activities being planned. This forecasting requirement derives as much from the Stockholm Document, which already exists and contains such a requirement, as it does from the CFE proposals, which were still being negotiated at game time.

Regarding changes in force structure, it was assumed that any alteration in organizational structure or any addition of formations or units that was expected to last at least 1 year should not only be included in the annual forecast on December 15 but also be notified to the other participants at least 42 days in advance of the event. In addition, any changes of 10

percent or more in the peacetime authorized strength of personnel or treaty-limited equipment should be included in the annual forecast if known in advance; if not, such changes should be reported as they occur. This last requirement, like those mandating notification 42 days in advance, was drawn directly from NATO's CFE proposal. The annual forecasting requirement was imported from the Stockholm Document on the assumption that something like it would be adopted for CFE purposes as well.

The same kind of assumption about forecasting annually and notifying 42 days in advance was applied to military activities covered by either the Stockholm Document or the various CFE proposals. On the basis of the Stockholm Document, it was assumed that annual data exchanges would announce plans for any coordinated military exercise, movement, or concentration of land forces that would exceed 13,000 troops or 300 battle tanks, if either of these were organized into a divisional structure or at least two brigades/regiments not necessarily subordinate to the same division. The annual data exchanges would also include any planned amphibious landing or parachute assault exercise by airborne forces that would exceed 3,000 troops. Both types of military activity were also subject to separate notification 42 days in advance of their commencement with one significant exception: whenever either of these activities was carried out without advance notice to the troops involved (i.e., as an "alert"), notification was required only upon commencement of the activity.

On the basis of NATO's CFE proposals--in particular, the Stabilizing Measures introduced in September 1989--it was assumed that annual forecasting and notification in advance were required for any callup of reservists that would exceed 40,000; any movement of treaty-limited equipment that, within 14 days, would exceed 600 main battle tanks, 400 artillery, 1,200 armored combat vehicles; and any military activity involving more than 40,000 troops or 800 main battle tanks. For all but the last activity, the annual forecast plus notification 42 days in advance would suffice. For a military activity involving 40,000 troops or 800 main battle tanks, however, it was assumed in accordance with NATO's original proposal that such an activity must be notified at least 12 months--not simply 42 days--in advance of its commencement (as well as via the annual data exchange) and could only be conducted once within a 2-year period. During the NoREDs game, the players on both sides were told to assume that they were eligible to conduct such an activity late in 1994 provided they notified it via the annual data exchange on December 15, 1993.

In addition to the foregoing assumptions about CSBMs from the Stockholm Document and stabilizing measures from CFE, the May 1990 NoREDs game had to include assumptions about related verification provisions. NATO had proposed an ambitious menu of verification measures for CFE in September 1989. That menu included aerial inspections of designated areas, ground inspections of declared sites (i.e., those containing treaty-limited items), and ground inspections of nondeclared sites. All such inspections were to be subject to quotas both on the state trying to conduct an inspection (the "active" quota) and on the state being inspected (the "passive" quota). Furthermore, the Stockholm Document's own passive quota for on-site inspections--namely, three per country per year--was assumed to be operating in the NoREDs game.

Not all the provisions of the different verification measures were spelled out in detail in NATO's September 1989 proposal, nor had the intended quota system been entirely clarified by the time the NoREDs game took place in May 1990. To fill in the gaps, it was assumed that all inspections, whether by ground or by air, were to be conducted in predesignated areas—defined for game purposes as one of the hexagons in CFAW (see below). Within these areas, the inspecting side could conduct any of the three types of inspection (air, declared—site ground, or nondeclared—site ground) it chose, subject to the quota system as well as to the right of an inspected party to deny inspection of an undeclared site.

Further details on how the different types of inspections were represented in the NoREDs game appear below in the discussion of CFAW Assumptions. As for the quota system, which was still being developed in May 1990, the NoREDs game assumed the existence of both an active and a passive quota for inspections. The active quota determined the maximum number of inspection days that each and every participant in CFE had available to conduct inspections. It was further assumed that the participants on the same side (e.g., 111 the NATO members) could share the inspection days available to that side (e.g., Belgium could let Turkey use two of its inspection days). The passive quota set the maximum number of inspection days that each participant had to accept being inspected by others. It was determined by a formula, initially proposed by NATO to include, for each participant, a standard minimum obligation for each participant of three inspection days and an additional inspection day for every

- --100 combat aircraft and combat helicopters:
- --300 tanks, armored combat vehicles, and artillery pieces;
- --50,000 square kilometers of territory covered by the CFE agreement.

The total active quota of inspections on one side (e.g., for NATO) was assumed to be equal to the total passive quote of the other side (e.g., for the Warsaw Pact members). To account for anomalies such as the disappearance of East Germany by game time in 1993, the continued presence of Soviet forces in eastern Germany at that time, and the lack of any US or Canadian territory being covered by CFE, the passive quota for Germany was inflated to account for the presence there of stationed forces on the NATO side. In addition, a separate quota for Soviet forces in eastern Germany was added to the Pact side. The total numbers of passive quotas that resulted were as follows:

Table 2. Passive Inspection Quotas Assumed for 1994

Side	Country	Quota (no of days)
	Belgium	10
	Denmark	10
	France	40
	Germany	175
	Greece	30
	Iceland	6
	Italy	40
NATO .	Luxembourg	5
]	Netherlands	21
1	Norway	15
	Portuga1	10
	Spain	30
]	Turkey	40
	United Kingdom	25
	Bulgaria	16
	Czechoslovakia	30
	Hungary	20
Pact	Poland	30
	Romania	20
	Soviet Union	305
	Soviet forces in Germany	50

For the NoREDs game in May 1990, players on each side were allowed to conduct whatever type of inspection they wished, aerial or ground-based, within the limits of the quotas listed above. There was no separate quota for aerial inspections; such a quota ultimately became part of NATO's position.

As originally proposed by NATO, a limit of no more than four inspections taking place in any one country at the same time was also assumed for the NoREDs game. Furthermore, free inspection days were allowed for any military activity notified by one participant to the others under either the CFE treaty's or the Stockholm Document's provisions. In other words, the days required for inspection or observation of such nonreductions activities were not to count against the quotas. The assumption here was that the Stockholm Document itself and potential improvements to it via the CSBM talks in Vienna would make exceptions to inspection quotas necessary for purposes of monitoring notified military activities (as opposed to force levels).

CFAW Assumptions:

The Contingency Force Analysis Wargame at CAA furnished a variety of tools used throughout the game to help simulate the CFE environment in which the players were operating. In the first place, CFAW supplied a map of Europe from the Atlantic to the Urals (ATTU) that encompassed virtually the entire continent plus Iceland, Ireland, and the British Isles. This map was subdivided into hexagons with sides approximately 30 miles long and a center-to-center distance between hexes of approximately 50 miles. The net result was a hexagonal grid system that could be coded into the VAX computer supporting CFAW and later called up for viewing on CFAW's computer terminals.

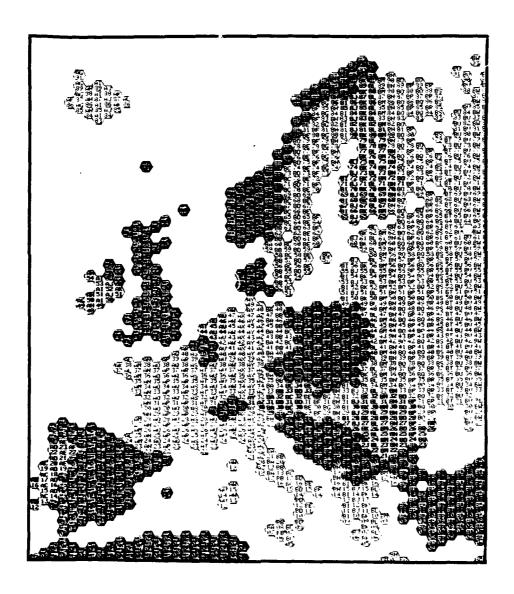


Figure 1. CFAW Map of ATTU Region for CFE Showing Hexagons

For each hex, terrain features characteristic of the territory it circumscribed were coded into the computer. Red and Blue units for all CFE participants down to regiment and brigade levels were similarly located within specific hexes. The terrain features would affect rates of movement by units across and between hexes, thus adding further realism to CFAW's time and distance calculations of any game-induced movement of units throughout Europe.

The units allocated to both Red and Blue represented the Control Team's best guess as to which forces might remain and how the forces remaining after an initial CFE reductions agreement might be deployed. This unit information was then rolled up by the model into lists that displayed the forces, their hierarchical organization (down to brigade/regiment level), unit locations, and unit holdings (e.g., personnel, tanks, artillery, armored fighting vehicles, helicopters, and aircraft). Their own lists were provided to the separate teams initially and to the other side eventually, during the exchange of data for 1994, which was discussed above. The CFAW Model also supplied day, night, and weather variables, with weather being varied on a probabilistic basis, since CFAW in essence is a stochastic model.

The stochastic aspect of CFAW directly informed the assumptions made in the NoREDs game about how to represent the basic intelligence tools and verification mechanisms proposed for monitoring compliance with the CFE agreement: national or multinational technical means of verification (NTM), air inspections, and ground inspections of either declared or nondeclared sites. To initiate all but NTM inspections with CFAW, the side wishing to inspect had to decide, subject to the quotas, where (which hexagon) and when to conduct an inspection, and to notify the other side of an intent-to-inspect. The side to be inspected had 2 hours to respond. That side could not deny inspection of a "declared" site, where treaty-limited equipment (TLE) was supposed to be, or had been, located or where military activities notified in advance were being conducted. The side to be inspected could refuse to permit inspection of a "nondeclared" site, however, either upon receiving a notification of intent-to-inspect or after the inspecting team had arrived in the designated hexagon.

National intelligence Aircraft

Nondeclared Site Declared Site

Figure 2. Intelligence Tools in CFAW for Monitoring NoRu

For NTM verification, as called for in NATO's proposals, CFAW was configured to provide readouts that were said to derive from overhead sources. Such intelligence was assigned a probability of 80 percent that the information it contained was accurate. During the test game earlier in May, various values for representing the output of NTM in CFAW were explored. The values ultimately selected for the main event were chosen not because they were "correct," but because they seemed generally representative of how such NTM might function relative to the ground and air inspection capabilities being proposed by NATO for CFE.

NATO's original intent or hope, it would appear, was to negotiate ground and aerial inspection measures for CFE that would provide somewhat better information on treaty-limited items than NTM would. To reflect this hope, aerial inspections in CFAW, which report back information from the same hexagon that an overhead satellite would cover, were accorded a probability of 85 percent that their information was accurate; ground inspections of declared sites in the hex were assumed to have a probability of 90 percent effectiveness; and ground inspections of nondeclared sites were considered 85 percent effective once a unit had been detected in a hex, with a 50 percent probability of detecting units within a 24-hour period (plus an added probability of detection keyed to unit activity levels). Aerial inspections could last only 12 hours, while ground inspections could take up to a maximum of 10 days, as provided in the NATO proposal.

Overhead NTM are tireless and virtually ubiquitous, of course. They can conceivably "map" all of Europe from the Atlantic to the Urals several times over within a 24-hour period. Nonetheless, there is a limit to what can be assimilated and interpreted within a given timeframe, which imposes a constraint when an overabundance of data is available. To reflect such a limit, the NoREDs game provided readouts from NTM overflights for up to 20 hexagons per week. Such information could be made available 12 hours after it had been obtained by overhead NTM; data from more than 20 hexes could be requested, but in that case, only the last 20 hexes requested would furnish readouts.

For aerial inspections, it took 16 hours (as stipulated in the original NATO CFE proposal) from notification of an intent-to-inspect before the inspecting aircraft could arrive in a designated hex; then it took 18 more hours (6 on the ground, 12 in the air) before CFAW was permitted to report the results of an inspection. For ground inspections, CFAW calculated the time it would take an inspecting unit to arrive in a designated hexagon; once that unit had arrived in the hex, it took 24 hours for the first and all subsequent reports (up to a maximum of 10 days, as provided in the NATO proposal) to be issued.

CFAW is also capable of providing "national intelligence" to both teams during a game. Such intelligence consists of information on units in CFAW's data bases that is supplied on an independent basis--i.e., it appears to derive from intelligence sources other than CFE inspections or NTM (e.g., human intelligence, ground-based communications intelligence, etc.). In fact, national intelligence is the product of three probabilities--of detection, of identification, and of activity--for every unit in the data base. CFAW searches its data bases periodically and reports out following some interval (e.g., 6 hours after each data search in NoREDs) on those units that fit all these probabilities.

The hexagons in CFAW's mapping of Europe for the NoREDs game served as focal points for most of the game's intelligence activities, as well as for the movement of units from place to place. NoREDs teams were told to assume that any notification of an intent to inspect required identification of the hex in which the inspection was to be conducted as a first order of business. Individual ground or aerial inspections were then confined to the hex thus designated, as were the data supplied by a particular inspection. A CFE agreement may ultimately prove to be more flexible in its provisions for defining the outer boundaries of the overall area to be inspected at any given time. In the meantime, organizing an inspection regime around the primacy of CFAW's hexes, a feature of the NoREDs game that could be changed if necessary, was an assumption that seemed reasonable in the absence of more specific alternatives in the original NATO proposals for CFE.*

C. Game Plan

In keeping with standard political-military gaming practice, the Control Team developed a plan for the conduct of the NoREDs game in May 1990. This game plan represented a general description or outline of the intended direction of events once the game got underway. Its purpose was to chart in advance the conceptual path by which a particular sequence of player moves would presumably wind up serving the game's overall objectives. Ultimately, of course, the game depends upon the actions of the players, and the game plan cannot control or predict those actions. A good plan, however, can structure and sequence the choices that players must make to ensure that, whatever actions they decide to take, their moves will help answer the larger questions the game is addressing.

For the NoREDs game in May, the plan (which is included in full at Appendix C) was to begin the game in a not-too-distant future peacetime environment. Hence, it was decided to consider the CFE agreement as having been in effect for approximately 3 years and the required reductions to parity at lower force levels as having just been achieved and verified. The intent was to focus the game on how the nonreductions measures might work in a postreductions environment. This objective would be served by skipping

^{*}For additional information on how CFAW works, see Contingency Force Analysis Wargame (CFAW) Player's Handbook (Bethesda, MD: US Army Concepts Analysis Agency, Technical Paper CAA-TP-87-3, May 1987, Revised September 1987).

ahead in time to a point 3 years beyond signature of a CFE agreement (as noted above, this was assumed to have occurred by January 1991), the interval originally proposed by NATO for completion of agreed force reductions.

According to the plan, therefore, Move I was set for November 1993. In that month the Soviets were to announce the unilateral withdrawal of their remaining forces from the eastern portion of a recently united Germany, and NATO leaders were to respond by pledging to take reciprocal unilateral action. November 1993 was also the month preceding the annual exchange of CFE data due on December 15. To familiarize the players with that data, as well as with the forecasting and notification requirements of Stabilizing Measures in CFE and CSBMs in the Stockholm Document, the game plan envisioned both teams devoting the first move to preparing their submissions for the annual data exchange on December 15. At the same time, they were to become familiar with, but not yet do anything about, two potential crises developing in Europe: one between Germany and Poland and the other among Yugoslavia's ethnic groups (as noted above in the discussion of scenario assumptions).

Move II, which was to follow immediately after Move I on the game's opening day, was planned to take place on December 16, the day after both teams' annual data submissions had been exchanged. The data exchange was to be accomplished by giving each team a copy of the other's unit lists (complete with unit locations and holdings as generated by CFAW), and the data was to be certified by the Control Team to represent good faith compliance up to that point with both the letter and the spirit of the CFE agreement. On the basis of this data exchange, both teams were to devise inspection strategies for the year 1994 and to allocate leftover inspection quotas for the remainder of 1993.

The purpose of this move was to get the teams familiar with and have them begin using the CFE verification measures and the Stockholm Document's inspection and observation provisions. In particular, the objective was to familiarize them with the tools provided via CFAW for simulating these capabilities. Meanwhile, the incipient crises in northern and southern Europe, which were introduced in the previous move, were to begin escalating, although the players were not yet expected to take any action on them.

Move III was scheduled to take place on the second day of game play. With both teams now schooled in the basics of a putative CFE agreement, of non-reduction measures, and of CFAW's attempt to simulate them, the plan was now to turn player attention to the crisis escalation scenarios in northern and southern Europe and to see how they might employ the measures in this context. By manipulating the scenarios, the Control Team would seek to induce player interest in using nonreduction measures not only to monitor the record of compliance with CFE but also to send signals of intent with respect to the developing crises. The hope was that the players would develop creative ways of employing the measures to signal nonhostile intent clearly, without risk of misunderstanding or misperception, even as they used the same measures to confirm or deny the existence of similar intentions on the other side.

To delve into this interactive—signal ending as well as interpretive—aspect of the measures, Move IV was scheduled to proceed in staggered fashion. The Red Team would play the move first, on the second day of the game, while the Blue Team would respond to this and the preceding Red move on the third day of the game. For Move IV, both of the developing crises would escalate even further and become more tense. The intent was to create a kind of "fog of crisis" in order to stress the arms control regime in Europe; the objective was to see how the nonreduction measures would function in that hyperactive environment. Would they help pierce through the fog, by facilitating both sides' abilities to send and receive clear messages of intent, or would they only increase the murkiness?

Move IV would be devoted to answering this question in a crisis situation that neither side wanted to see get out of hand. This move and its immediate predecessor, in other words, were designed to test the second hypothesis introduced above—i.e., the proposition that nonreduction measures will make positive contributions to the amelioration of crises that neither side wants to see escalate. The first and second moves of the game were planned to test the initial hypothesis, namely, that nonreduction measures will work as intended to help verify compliance with CFE.

To test the third hypothesis presented above, Move V was added to the game plan. Its purpose was to see whether nonreduction measures can indeed help preclude the kinds of deception generally associated with the possibility of surprise attack or large-scale offensive action. The plan envisaged that the fifth move would also be played on a staggered basis, with the Red Team going first and the Blue Team reacting to what Red had done. To launch this move, the Red Team would be directed by the Control Team to plan a large-scale offensive action. The planned attack would be associated with one of the two developing crises in the scenario and would take place under conditions of surprise and deception. The Blue Team would then be presented with the move Red had produced to see whether, given the availability and presumed benefit of nonreduction measures, Blue could detect Red's hidden intention. Following the Blue Team's deliberations, the game would end, both teams would get together, and a general review of the game would be conducted.

Section III. INITIAL GAME MOVES

The purpose of this section is to discuss the first two moves of the NoREDs game as they were played at CAA on May 17, 1990. These two moves were addressed to the first hypothesis presented in Section II, the one which contends that nonreduction measures will function as intended to help verify compliance, or the lack thereof, with a CFE agreement. In this section, the scenarios and other information presented to both sets of players are described in the order presented. The players' considered responses in terms of their respective team's "moves" are likewise described as they unfolded during the course of the game.

A. Move I

Both teams gathered together on Thursday morning, May 17, to be briefed on the nature and purposes of the NoREDs game that they were about to play. With the aid of briefing charts, printed copies of which were provided for their individual use, the players were given to understand the assumptions presented in Section II about who they were supposed to be; when the game was taking place-i.e., it was starting in November 1993; how Europe, the US, and the USSR appeared at game time (e.g., incipient crises in both northern and southern Europe; Germany unified; Soviets withdrawing from eastern Germany by 1995; NATO reciprocating; Bush and Gorbachev still in office); what the CFE agreement looked like in both its reductions and its nonreduction aspects; and what the annual data exchanges due on December 15, 1993 required them to do: include impending force structure changes and forecast planned military activities. Copies of the charts used to brief the players may be found in Appendix D.

Following this introductory briefing, the two teams retired to separate rooms within the area where CFAW is housed at CAA to begin developing their initial move papers for the game. When they arrived in their appointed locations, each team received a further orientation to the facilities afforded by CFAW. Each was presented a data printout detailing its forces located within the CFE area, as well as two conventional wall maps covering that area. One of these maps clearly depicted the zonal arrangement proposed by NATO for controlling the distribution of residual force levels under a CFE agreement. The other map featured an overlay subdividing the ATTU region into some 2,500 individually identified hexagons, each measuring approximately 50 miles from center to center. This last map corresponded to a more stylized version based on the hexagons that players could call up on CFAW's computer screens (a representation of which appears as Figure 1 on page 12).

Before getting down to game play, each team received some hands-on instruction in how CFAW works--especially in how to use its computerized map with its zoom-in-and-out capabilities to identify unit locations. These were represented on the map as blue or red markers. Whenever a particular colored marker appeared in a hex, it indicated the presence there of one side or the other's unit(s). Such indicators could then be cross-checked with CFAW's data bases (e.g., the printouts provided each team) to ascertain, among other items of information, the personnel and equipment strengths of the units identified.

Once they became familiar with the data and the facilities being provided for the game, members of the Red Team objected to the dispositions that the Control Team had provided for Soviet units remaining in eastern Europe and the USSR following implementation of force reductions under a CFE agreement. Indeed, as indicated earlier in this paper, the Control Team had simply used its own best judgment in placing residual Red units in their post-CFE locations. Official estimates of where those locations were most likely to be had not been consulted prior to game time. Taking advantage of the expertise assembled in the Red Team's players, however, the Control Team was able to make some informed adjustments in the initial deployment of Soviet units, alter their locations in the CFAW data base, and communicate the changes to both sides before the game actually got underway.

For ease of reference, three charts from Appendix D are reproduced below. These charts were used to introduce both teams to the thresholds as well as to the kinds of military activity requiring notification in advance. Taken together, they comprise a list of the rules by which the two teams were operating in Move I.

Requirements for Notifying Military Activities in Advance

US ARMY



Annual Forecasts of Planned Military Activities (to be included in annual data exchanges at year's end)

- Any military activity involving more than 40,000 troops or 800 main battle tanks
 - -- must be notified at least 12 months in advance
 - --can only be conducted once within a 2-year period
 - [- participants on both sides are eligible to notify and conduct such an activity in (late) 1994]
- A calendar of planned military activities subject to prior notification (42 days in advance)
 - --- see following charts) during the forthcoming year, to include:
 - --general characteristics and type of activity;
 - --location and duration (start and end dates) of activity;
 - --states participating and level(s) of command involved;
 - --numbers and types of troops/units/TLE engaged;
 - --participation of air forces if more than 200 sorties by aircraft, excluding helicopters, planned

(8

US ARMY



Notifiable Military Activities - I (subject to notification 42 days in advance)

- A call-up of reservists that exceeds 40,000, which requires notification of:
 - --Number of reservists involved
 - -- Designation of units affected
 - -- Location of units affected
 - --Purpose of call-up
 - -- Duration of call-up
- Any movement of treaty-limited equipment, within 14 days, that exceeds:
 - --600 Main battle tanks
 - --400 Artillery
 - --1,200 Armored combat vehicles (ACVs)

(9)

US ARMY



Notifiable Military Activities - II (subject to notification 42 days in advance)

- Any coordinated military exercise, movement, or concentration of land forces that exceeds
 - -- 13,000 troops

or

- -- 300 battle tanks
- -- If organized into a divisional structure or at least two brigades/regiments not necessarily subordinate to the same division
- Any amphibious landing or parachute assault by airborne forces that exceeds 3,000 troops
- Exception: Whenever these military activities are carried out without advance notice to the troops invilved (i.e., as "alerts"), notification will be given upon commencement of such activities

(10)

• Red Move I

When the time came for them to complete their first move, the Red Team responded to both CFE's annual data exchange requirement and the scenario's promise of a unilateral withdrawal with a schedule for the removal from eastern Germany of approximately one Soviet division per month throughout 1994. (Only in April was no movement of ground units planned.) This followed the announced withdrawal by Red of an independent tank regiment in December 1993. Soviet air units were to be removed continuously from February through October 1994 (except for May and September, when no such movement was planned) at the rate of one air squadron per month. Most of the ground and air units pulled back to the east were redeployed into the western military districts of the USSR (i.e., the Baltic, Byelorussian, and Carpathian Military Districts), and within these districts, for the most part, in areas of the USSR adjacent to the Polish border.

The Red Team also announced plans for a variety of military activities to be conducted throughout 1994. These began with a Bulgarian division (the 71st Motorized Rifle Division) that was to conduct a field training exercise (FTX) in excess of 13,000 troops for 5 days in February. The USSR itself was scheduled to stage a similar exercise for 7 days in the Byelorussian Military District; it was to involve the Soviets' 34th Tank Division and 15,000 troops during March. In April, Soviet forces in eastern Germany--namely, the 12th Guards Tank Division near Gottbus--were to conduct a division-level FTX involving more than 13,000 troops over 7 days. This was to be followed in May by the 94th Guards Motorized Division in the vicinity of Neubrandenberg, Germany, exercising for 5 days at division level with over 13,000 troops.

In June, the Poles were scheduled to conduct an army FTX focused on coastal defense that was planned to last 6 days and to involve the 2d and the 4th Polish Motorized Rifle Divisions as well as more than 13,000 troops. In July, the Soviets were to hold a division-level exercise in the Carpathian Military District with the 84th Motorized Rifle Division and over 13,000 troops participating. This was to be followed toward the end of August 1994 by a 3-day multiregiment field exercise for airborne forces (in excess of 3,000 troops) near Pskov in the Leningrad Military District and by an FTX near Brest in the Baltic Military District that was to involve over 20,000 troops, the New Army Corps redeployed from the Group of Soviet Forces in Germany, and the 81st Motorized Rifle Division for 10 days. Czechoslovakia planned to conduct an FTX in October near Prague that would exceed 13,000 troops, last for 6 days, and include elements of the 20th Czech Motorized Rifle Division and the 30th Czech Tank Division.

Finally, Poland and the USSR announced plans to hold a joint military exercise in Poland during October that would involve two Soviet and two Polish divisions for 10 days in a refinement and test of defensive doctrine. Since this exercise would exceed 40,000 troops and 800 tanks, it had to be notified 12 months in advance of its inception. If the exchange provided on December 15, 1993 had constituted the first and only advance notification of the joint Polish-Soviet exercise, that exercise could not have been held before December 1994. The Control Team decided to assume, however, that the exercise had been separately notified before or during October 1993 and that the December exchange was simply confirming that notification, incorporating it into the annual forecast as required, and providing an update.

• Blue Move I

In its submission for the December 1993 data exchange, the Blue Team announced that it would be removing the 2d French Division from Germany in February. Five German brigades from five different divisions were also scheduled to be converted from active to reserve units in April. For June, Blue announced the removal of the 8th US Division from the ATTU region. In addition, Blue expressed a willingness to reduce its forces even more—by converting an additional five German brigades to reserves and removing the 2d US Division—provided the Soviets were to reduce more forces or lower their readiness to increase Blue's security. As for notifiable military activities in 1994, the Blue Team announced the planned callup in March of 30,000 German reservists, as well as a joint US, UK, and German exercise of approximately 25,000 troops scheduled for September in central Germany.

B. Move II

Both teams regrouped in the early afternoon on Thursday, May 17, to be briefed on the updated scenario and given other information required for the game's second move. The charts used for that briefing, copies of which were provided to each player individually, are included at Appendix E. Game time for this move had been advanced to December 16, 1993, the day following the deadline for the annual exchange of data that both sides had compiled during Move I.

As of this date, each side had received the other's submission and the Control Team had vouched for the veracity of that portion of the data which represented the lists of units, their starting locations, and their post-CFE-agreement holdings. Both sides, in other words, now had trustworthy copies not only of their own force's composition, as held and provided by CFAW, but of the other side's baseline data as well. This was in keeping with the ingoing assumption of the game that both sides were considered to be in compliance with CFE's force reduction provisions by the end of 1993.

For Move II, both teams were told that the twin crises developing in northern and in southern Europe were heating up. The Poles, for example, were reported to be at the point of using armed force to curb demonstrations by minority ethnic Germans living in Poland, much to the distress of the recently unified German state. Moreover, the likelihood of violent, forcible dissolution was said to be mounting in Yugoslavia as Albanians, Croatians, and Slovenes pressed toward breaking away from that Serbian-dominated multinational state, thus raising concerns for (among others) neighboring members of a militarily diminished Warsaw Pact. The emphasis in Move II, however, was less on the scenario than on the verification tools available for monitoring the data recently provided in the annual CFE exchange.

In the introductory briefing for Move II, most of the time was devoted to reviewing the verification measures proposed by NATO for CFE and to explaining how these measures and others—i.e., CSBMs for observation and verification from the Stockholm Document—were being treated in the NoREDs game. Players on both sides were led through the assumptions for verification measures that were presented above in Section II. The different types of measures being played were specified: national technical means of intelligence, air inspections, declared—site ground inspections, and nondeclared—site ground inspections. It was explained that the provisions from the Stockholm Document for observation of notified military activities and for onsite inspections would be treated as analogous to nondeclared—site inspections, except that there would be no right of refusal for these CSBMs as there was for CFE inspections of nondeclared sites. Each team was assured that its approval would be sought before any such CFE inspections would be allowed to proceed during the game.

The role of CFAW in simulating these various measures was explained at length to the players. In addition to data from NTM, air, and ground inspections, CFAW's capability to provide "national intelligence" data on a probabilistic basis was included in the explanation. Also included was a detailed discussion of the inspection quotas being used in the game. The concept of inspection days—i.e., the number of 24-hour periods in which an inspection team (ground or air) can be in the field conducting inspections—

was defined for the players. Furthermore, they were told that inspection quotas were being calculated for the NoREDs game on the basis of the maximum number of inspection days that each participant had to accept being inspected by others--i.e., the so-called "passive quotas" discussed above in Section II. According to NATO's CFE proposals, moreover, no more than four inspections were permitted to take place in any one country at the same time.

To account for the Stockholm measures, the players were told that every time they chose to inspect a military activity that had been notified in advance, such an inspection would not count against their quota of CFE inspection days. Instead, the Stockholm Document's own passive quota for onsite inspections—namely, three per country per year—was assumed to be operating in the NoREDs game.

At the close of the introductory briefing for Move II, the players were informed that they still had a number of inspection days remaining during 1993. This remainder was attributed to the inflated numbers of such inspections provided during each of the first 3 years of the CFE treaty for the monitoring of agreed force reductions as they were taking place. Specifically, the teams were told that the status of inspection quotas remaining on December 16, 1993 was such that:

- up to 14 inspection days were available for the Blue Team to inspect the USSR;
 - --up to 3 days remained for inspecting Soviet forces stationed in Germany
 - --up to 5 days each could be used to inspect other East bloc participants;
- up to 8 inspection days remained for the Red Team to inspect forces in Germany:
 - -- up to 2 days each could be used to inspect other NATO participants.

The players were informed that they should plan either to make use of these remaining quotas during the next 2 weeks or to lose them forever.

In addition to providing any requests for inspections to be conducted between December 16, 1993 and the end of the year, the players were asked to come up with a strategy for conducting inspections and rationing the quotas available during 1994. They were to indicate how they would envisage spreading the total number of inspection days allotted to them throughout the year—for example, by providing the percentage of total inspection days to be used during each quarter of the year. The players were also instructed to decide whether, when, where, and how they wished to conduct any inspections during January 1994. In deciding to conduct such inspections, they were reminded to take into account the changes in force structure initially announced by both the East and the West in November 1993. These changes had appeared most recently in the annual data exchanges and planning calendars that both sides had just received.

Furthermore, each team was asked to consider and recommend a policy for dealing with the other side's requests for nondesignated site inspections. Both teams were to put this policy into operation in the near term by deciding whether or not to refuse any requests for inspection of nondesignated sites that the other side might submit as part of its year-end, "use or lose" inspections. Finally, the teams were asked to submit their requests for NTM coverage during the last 2 weeks of 1993. According to the rules adopted for this game, CFAW would provide each team with readouts from overhead sources for up to 20 hexagons per week, with a probability of 80 percent that such readouts would be accurate.

• Red Move II

To take advantage of its "use or lose" inspection days in December, the Red Team planned to conduct three different declared-site ground inspections in Germany. On December 18-20, the team planned to inspect the hexagon containing the US 2d Division; on December 17-19, a hex containing elements of the German 1st and 3d Divisions; and on December 28-29, the hex containing elements of the US 1st Division and a US helicopter brigade. In January, Red planned to launch declared-site ground inspections of hexagons in Germany where elements of the German 2d Division (January 3-4) and the German 5th Division, the UK 1st Division, and another US helicopter brigade (January 23-28) were located. Red planned neither nondeclared-site ground nor air inspections for either December 1993 or 1994.

Red's pattern for the gathering of NTM intelligence during both December and January was the same. The bulk of the team's requests for such intelligence focused on hexagons in or adjacent to the borders of western Germany, with occasional requests (three, to be exact) for NTM intelligence on hexes in the Balkans. Moreover, Red adopted an overall inspection strategy for 1994 of apportioning out approximately 25 percent of its inspection days to each of the first three quarters of the year, of allocating 20 percent of these days to the last quarter, and of maintaining a 5 percent withhold for use at any time deemed necessary throughout the year.

• Blue Move II

During the last 2 weeks of December 1993, the Blue Team planned to conduct declared-site ground inspections of several Soviet divisions in the Baltic Military District and one division in the Leningrad Military District starting on December 16. Beginning on December 20, Blue intended to inspect three Soviet divisions in the Carpathian Military District and one in eastern Germany; on December 26, three divisions in the Byelorussian Military District, as well as three divisions and two independent tank regiments in eastern Germany; on December 28, a Soviet division and air force squadron in Poland; and on December 29, one division each in the Moscow and the Transcaucasus Military Districts, as well as one other Soviet division and two more air force squadrons in Poland.

In January 1994, Blue planned to conduct declared-site ground inspections of the locations in the USSR to which the Soviet forces announced for with-drawal from Germany in December and January were scheduled to move. Like Red, the Blue Team did not request any nondeclared-site ground or air inspections during this move. Blue adopted an inspection strategy for 1994 that consisted of subtracting 5 percent from their annual quota of CFE inspections for each country to create an end-of-the-year reserve. Blue then planned to use up one-twelfth of the remaining number of inspection days per country every month.

The Blue Team allocated its final week of NTM coverage in December to territory deep in the USSR near the eastern boundaries of the ATTU region. During the last weeks in December and the first 2 weeks in January, however, Blue changed the pattern of its NTM coverage to focus primarily on Poland, with occasional forays during the second week in January into border areas between the USSR, Poland, Czechoslovakia, Hungary, and Romania. Blue players called for more NTM capability for their team, given the vast areas they had to cover in eastern Europe and the USSR. By contrast, Red players considered the NTM capabilities afforded them to be adequate, given the small amounts of territory in western Europe (primarily Germany) that they felt compelled to cover.

Section IV. LATER GAME MOVES

This section focuses on Moves III and IV as they were played out in the NoREDs game at CAA on Friday morning, May 18, 1990, when both teams played Move III; on Monday afternoon, May 21, when the Red Team played its Move IV; and on Tuesday morning, May 22, when the Blue Team constructed its response. The two moves discussed in this section address the second of the three hypotheses being tested in the game. This hypothesis contends that, in a transition from peacetime to crisis conditions, NoREDs will function effectively as a means for sending and receiving clear, unambiguous signals of nonhostile intent. As a result, chances of a crisis escalating because of misunderstandings or misperceptions will be reduced considerably. The section describes Moves III and IV in that order and in detail.

A. Move III

To begin Move III, the game clock was advanced for both teams by 1 month, to January 16, 1994. Both teams were also provided with the same scenario, which featured escalating crises in both northern and southern Europe. In northern Europe, according to this scenario, Poland had repeatedly rejected various German offers of increased economic aid in exchange for concessions to German minorities in Poland. Upset by both the official and the unofficial support for these minorities emanating from Germany, the Poles had begun restricting border crossings between the two states. Instead of offering economic carrots for concessions on minority rights, as before, a frustrated German government was now threatening to cancel loans and withdraw previous financial commitments. The Germans, moreover, had responded to Poland's border closings with a strong diplomatic protest and an increase in the alert levels of Germany's border guards.

The USSR, meanwhile, and all other members of the old Warsaw Pact had affirmed their support for fellow-member Poland's position in the dispute with Germany. In fact, the Pact's Political Consultative Committee (PCC), comprised of the foreign ministers of the six member states, had already met in Warsaw on January 16 to discuss further responses to Germany. The NATO allies apart from Germany itself had yet to adopt an alliance-wide position on the issue.

By contrast, NATO had spoken out publicly about the crisis developing in southern Europe. There, mounting unrest in Kosovo, Croatia, and Slovenia was threatening to tear Yugoslavia apart. (For the location of these and other areas in and around Yugoslavia, see the following map.) The alliance had warned against any external interference in Yugoslavia's internal affairs, which by January 16 seemed to be moving toward all-out civil war. At its meeting in Warsaw, the Pact was also considering the latest Serbian appeals for support in view of the deteriorating situation.



Figure 3. Map of Yugoslavia Showing Subregions

The foregoing scenario developments for Move III were communicated to both teams identically. Each team, however, received separate instructions and some additional information that were not provided to the other side. (Both the scenario and the instructions provided to each team can be found in Appendix F.) The Blue Team, for example, was asked to develop and recommend a political-military strategy in view of the crises beginning to escalate in both northern and southern Europe. NATO, it was told, had agreed that dramatic military actions were not called for at present and that any military responses to further developments should be measured and nonbelligerent. The Blue Team was also told that even the Germans agreed on the need to avoid saber-rattling at this point. Instead, the team was encouraged to use arms

control tools from CFE and elsewhere to send signals of continuing resolve, as well as of restraint, to the other side.

To this end, the players were provided with the following examples of options to consider employing:

- -- the "creative" use of military exercises to show resolve and/or restraint;
- -- similar use of arms control provisions requiring advance notification of various military activities;
- -- redeployments of forward-based (or other) forces;
- -- aggressive use of CFE and other "inspection" possibilities.

The Blue Team was asked to review its previously recommended strategy for conducting inspections during 1994—in particular, inspections scheduled for the remainder of January—and to make any changes required as a result of the current situation. The team was also asked to review reports from inspections conducted in late December and early January, as well as other intelligence information, for what they might reveal about the capabilities and intentions of Soviet and Warsaw Pact military forces up to that point in the game.

The Red Team was provided with what the Control Team identified as a general assessment "by the Soviet leadership" of both the current state of play and the USSR's perceived interests in the two crises brewing in Europe. Actually, this assessment had been developed by the Red Team that had helped test run the game at CAA during the preceding week. The assessment had proved useful in the earlier game. Suitably amended to fit the circumstances of the current move, it seemed likely to make a contribution to this game also:

We believe that Germany remains a much bigger threat to Soviet interests than the Yugoslavian problem. German actions to date do not require any dramatic military actions, however, and we wish to be able to say to the rest of the world that German actions—not Soviet reactions—are clearly the problem. Political rather than military measures must therefore carry the burden of containing the Germans, who have a historical tendency toward aggression that has harmed all peoples (including the Germans). There is a good chance of Warsaw Pact solidarity on many of these issues, given the East Europeans' fears of German aggression.

We continue to believe that Yugoslavia's Warsaw Pact neighbors, Romania, Hungary, and Bulgaria ("RH&B"), can and will take the lead in helping the Serbs. We should secretly encourage RH&B to provide covert assistance—advisors, weapons, training exchanges—to the Serbians, and we should be receptive to what the RH&B recommend that we do. Diplomatically, we should overtly support the Serbs as the current leaders of a legitimate national government, and we believe that the Pact as a whole can be persuaded to do so at the PCC as well. We should offer to mediate the Yugoslavian difficulties, emphasizing that the Soviet Union has much experience with the Slavic peoples and has in the past few

years met many challenges involving minority nationalities. We are also open to participating jointly with other mediators as well.

The Red players, like the Blue players, were given additional instructions from the Control Team, although in Red's case these were couched in terms of "further guidance from the leadership." Red was told that some military measures should be take: for the sake of prudence but that these should be limited, nonbelligerent, and compatible with the overall strategy of isolating the Germans in northern Europe. There was to be no change to the force data submitted for 1994. The withdrawal of all Soviet units from eastern Germany was to continue as previously announced on precisely the same schedule.

In this context, the "leadership" volunteered its opinion to the Red Team that, until Soviet forces had completely departed their country, the Germans were unlikely to try anything major; that there would still be plenty of Soviet units left until well into 1994; and that changing the withdrawal plans would be an overreaction. Instead, the leadership advised using arms control measures to help serve Soviet objectives in this situation, thus employing whatever CFE or other tools were available to help demonstrate both resolution and restraint in the face of German pressure. The Control Team, in other words, was urging the Red Team as well as the Blue Team to eschew outright saber-rattling and to employ existing arms control provisions as multipurpose signaling devices. Red players were also asked to review their previous plans for any inspections scheduled to take place later in January 1994 or beyond.

• Blue Move III

The Blue Team responded to these instructions with a move, the overall approach of which was, as they put it, "to use arms control measures to better understand the situation we face without influencing it too much and without undermining the purposes of various measures." Blue players proposed immediate aerial inspections of two hexagons in Czechoslovakia and one in Hungary to be conducted jointly by the Netherlands, Belgium, and Luxembourg from January 17 through January 19. They planned to conduct declared-site ground inspections of a Romanian tank division on January 18; of a Bulgarian regiment on January 23; and of a Soviet division, which was scheduled to withdraw from eastern Germany in February, on January 30. Blue also requested a nondeclared-site inspection of a hex in the Byelorussian Military District on the border with Poland, one in which no military units were yet located, to commence on January 29.

In addition, the Blue Team decided to have the United States contact France bilaterally with a request that the French ask the Swiss to conduct an inspection in eastern Germany and also persuade the Swedes to inspect in western Poland under the auspices of the Stockholm Document. Elsewhere, Blue players asked for NTM coverage of the border areas between Yugoslavia and Hungary, Romania, Bulgaria, and Albania, as well as the Kosovo region within Yugoslavia. They made no changes in their previously announced 1994 program of military exercises.

The Blue Team explained the strategy behind these various initiatives as follows:

Declared-site CFE inspections are being conducted at a regular rate to collect information without creating concern. Attempt has been *not* to increase or decrease the rate in reaction to events. CDE [i.e., Stockholm Document] inspection has been used in the most innocuous way possible—with neutrals—to get information without imbalancing the situation. Having European neutrals inspect keeps the issue between Germany and Poland "continental" and less likely to be complicated by outside interests.

Our inability to do anything without expensive consequences keeps our efforts confined to use of NTM and routine CFE inspections. A blowup in Yugoslavia would have to be closely monitored, but is unlikely to present openings for successfully influencing the situation.

Red Move III

In response to its instructions, the Red Team planned to conduct declaredsite ground inspections of German mechanized and armored units for 2 days beginning on January 18 and for 1 day on January 22. In addition, Red requested a nondeclared-site inspection of a hex within western Germany for 2 days starting on January 25. The Red Team decided to conduct as "alerts" two field training exercises for units from two different Soviet divisions in Germany, one on January 20 and the other on January 25, and it announced plans to schedule a 3-day exercise in March of the "unified" air defense system in which all members of the Warsaw Pact were ostensibly going to participate. Red also announced that the joint exercise of Polish and Soviet forces originally scheduled for October 1994 was being moved up to the middle of May. (Such a change would probably be prohibited by CFE, given its constraint requirement for notification of exercises in excess of 40K at least 12 months in advance; as noted above, this exercise was presumed to have been notified originally either before or during October 1993.) As for NTM, Red simply continued the repetitive pattern of overhead sweeps of western Europe that it had already established during December and early January.

The Red Team described its strategy as one of adapting military policy to make it consistent with the Soviet leadership's policy of restraint, while continuing to demonstrate the USSR's resolve. Hence, the team planned to increase the number of ground inspections it wanted to conduct, particularly of German units, and to introduce its first request for a nondesignated-site inspection. Notwithstanding its having advanced the schedule for the joint Polish-Soviet exercise, Red believed it was avoiding any unit movements or force structure changes that could be construed as provocative, especially since it was continuing the redeployment of Soviet forces from eastern Germany to the USSR on schedule.

Red players considered their NTM coverage sufficient to provide adequate intelligence and warning as well as compliance information. They judged NATO to be in compliance with the CFE agreement and with previously announced military plans. Even though there were variances in NATO unit strengths as reported by NTM, the Red Team felt reasonably confident that if ground inspections of a unit were cross-referenced to NTM coverage of the same unit, differences between NTM and baseline data could be explained satisfactorily.

Moreover, Red players said that they liked ground inspections for another reason, namely, because they provided an excellent means for them to "show the flag" when that seemed called for, as in Move III.

It should be noted in passing that both teams requested nondesignated-site inspections for the first time during this move. The Control Team communicated each of these requests to the other team as soon as it was made, since NATO's original CFE proposals provided a right to refuse this type of inspection. In their initial moves, both teams had adopted ad hoc, wait-and-see policies with regard to such requests: they would take into account conditions at the time before determining whether to grant or deny any inspections. During this move, both teams agreed to accept the other's request and to permit the nondesignated-site inspections to go forward as planned.

B. Move IV

The scenario and the instructions provided to both teams for this move are summarized below. Copies of what was actually presented to each team during the game can be found at Appendix G.

• Red Team

Red played its fourth move before Blue did. On Monday afternoon, May 21, the Red Team reassembled to be presented with a scenario updated to February 1, 1994. The team was informed that Poland's "none of your business" response had angered the German government, which had increased its pressure on Poland since January 16 with a combination of steps designed to demonstrate resolve and to produce concessions:

- -- Economically, the Germans had canceled some loans, as threatened, and announced that they were withholding delivery of aid promised to Poland until their demand for talks on the issue of minority rights in Poland had been met by the Polish government.
- -- Militarily, Germany had announced suspension of its plans to convert five of its brigades from active to reserve status in April 1994, as notified via the annual CFE data exchange in December 1993; the Germans were also talking about advancing to February the callup of 30,000 reservists originally notified in that exchange for March.
- -- Politically, the Germans had enlisted selected allies (the US and France) to act as go-betweens for them with the Poles and their supporters (e.g., all the other members of the Warsaw Pact).

The German view on this last (political) area, the Red Team was told, was that the US and French role was to get the Poles and others to "listen to reason" on the minority issue and make concessions.

Meanwhile, within eastern Germany, the German government had permitted-even encouraged, some would say--organized demonstrations around remaining Soviet military bases. In one incident at Dresden, civilian demonstrators and Soviet military personnel had engaged in a confrontation that turned violent when the Soviets used tear gas to disperse a crowd gathered outside

their garrison. The Red Team was also told that, following its Political Consultative Committee meeting in mid-January, the Warsaw Pact had announced that its members would be conducting additional military exercises, that these would include a Pact-wide air defense exercise in mid-March, and that the Soviets and the Poles were planning to reschedule their joint 10-day military exercise from October to mid-May.

As for Yugoslavia, Red was informed that it had become a war zone, with Serbian nationalists running the army and trying to suppress insurrections and independence movements in Kosovo, Croatia, and Slovenia. The Yugoslav Army was especially hard pressed to hold its own against the Albanian uprising in Kosovo, which was being supported by neighboring Albania, newly emergent as a CSCE member with increasing ties to NATO countries (e.g., Turkey). Several western states (e.g., Italy, Austria, and Germany), in fact, were rumored to be on the verge of recognizing Croatia and Slovenia. As a result, Serbian diplomats were beginning to suggest that Yugoslavia would join the Warsaw Pact if that would improve its chances of obtaining help to remain unified.

Concerned by these untimely developments in southern Europe, Red was told, various Warsaw Pact members had announced plans to carry out joint exercises, on their own territory, with Soviet forces invited to participate. In addition to Bulgaria and Romania, even Hungary was planning to join in these exercises. Increasing numbers of refugees from the turmoil in Yugoslavia were escaping into Hungary. This was beginning to strain its fragile economy, as well as its continuing attempts to restructure along western lines while maintaining political stability.

The Red Team was also provided with information derived from the Blue Team's previous move. It was informed that the Americans had contacted the French to request that they ask the Swiss and the Swedes to conduct inspections in the eastern part of Germany and the western party of Poland, respectively, under the auspices of the Stockholm Document and its CSBMs. Apart from Germany's talk about advancing the date of its planned callup in March of 30,000 reservists, Red was told that there were no other announced changes in the NATO countries' exercise program as notified in December.

On another front, Red was informed that Ukranian nationalists in the USSR had recently passed a secession declaration comparable to those initially received from the Baltic states in 1990. Given the "lesson" learned from those early Baltic declarations (i.e., when necessary, Soviet military force would be employed to thwart their implementation) in the context of the recent Ukranian action, it was unclear as yet what next steps the Ukranians proposed to take.

Playing the role of the Soviet leadership, the Control Team provided further general guidance on these various issues to the Red Team. Once again, much of this guidance derived from positions developed by Red players in the test game conducted at CAA the week before. The Red Team was told, therefore, that although the situation in Yugoslavia had clearly worsened, both geography and history compelled the USSR to continue treating the German problem as the larger threat:

Indeed, we are willing to remain relatively docile with respect to Yugoslavia if that is the price we must pay for Western support against the Germans. In both north (Germany) and south (Yugoslavia), however, we are basically continuing our previous policies: encourage political rather than military solutions, seek coordination rather than confrontation between Soviet efforts and non-German NATO efforts, and adhere strictly to the CFE and Stockholm agreements in all their particulars.

With regard to developments in northern Europe since January 16, the Soviet leadership had even more guidance to impart to the Red Team:

We consider US and French involvement as go-betweens for Germany with Poland to be a good sign. We will encourage France and America to make good use of their historical ties with the Poles and to emphasize that France and the US wish to see Poland continue to be politically free and economically strong. We assume that the US and France want to resist German expansionism. We see possible parallels with World War II if the US and France (and other non-German NATO nations) cannot restrain the Germans: Germany is moving against Poland; Czechoslovakia and Hungary could be next, and France and the BENELUX nations might then be next on the list. We do not intend to keep our fears a secret from the rest of the world.

The Germans' behavior suggests that we should maintain diplomatic relations with them but reduce the intensity of our direct efforts to convince them to check their expansionist tendencies. We should redouble our efforts to convince the non-German NATO nations to contain the Germans. We note that the Western powers of France, the US, and the UK participated in the 2+4 talks in which the Germans guaranteed that the postwar borders would remain inviolate, and that these Western powers are obligated to take all actions within their power to see that this quarantee is met.

We do note with regret, however, that the Germans' behavior makes conceivable a situation in which eastern European governments might request the restationing of Soviet forces on their territory to deter German aggression. If those governments made such a request, and if the Soviet Union felt that German behavior warranted such restationings, then the Soviet Union might agree to restation some of its forces now leaving eastern Germany—for example, in Poland. Immediately after it made such a decision, the Soviet Union would notify the CFE signatories. This restationing would, of course, be in accordance with CFE numerical limits, since the forces in eastern Germany would simply be moved to another location in Zone 4.

Following provision of this guidance to Red, Control asked that team to develop a new political-military game plan for use over the next 2 to 3 months, one that would counter the pressure from Germany in the north while maintaining Soviet support for Yugoslavia (and the Serbs) in the south and deterring any NATO or Western intervention in that area.

As part of this new game plan, Red was asked to assess Blue's capabilities and intentions as they related to compliance with the CFE treaty. In particular, the Red Team was instructed to provide an up-to-date assessment of the uses to which NATO as a whole appeared to have put its pattern of implementation of the entire CFE regime (including the nonreduction measures). Red was asked what message, if any, Blue might have been trying to convey by this pattern.

Red was also asked to review its own plans for military exercises and troop movements between February 1 and the end of March and to assess their potential contributions to the objectives vis-a-vis Germany and Yugoslavia proclaimed in the guidance provided above. If new exercises were deemed necessary before the end of March, Red was instructed to plan on having to notify the necessary details to other CFE and CSBM participants 42 days in advance. At this stage, in other words, the guidance still included a requirement to maintain Red's compliance with CFE and other arms control agreements.

• Red Move IV

The Red Team's response to this guidance was to construct the following assessment of the situation based on the information it was receiving from CFAW as a result of the various ground inspections, air inspections, and NTM taskings it had issued during the previous move:

Blue appears to be in compliance with CFE requirements. Their pattern of CFE inspections suggests that they are not aggressively monitoring Soviet withdrawals from Germany to date but, rather, are pursuing a broad strategy of monitoring static units in Poland and the USSR. Although at this early stage Blue as a whole appears to be following the letter and spirit of the accords, we continue to have concerns about Germany's aggressive political and economic policies as well as the trend in its force posture—to wit, its recent decision to suspend conversion of five brigades to reserve status.

In our judgment, there is no need at present to change our current military posture. Thus, the schedule of military exercises and force movements requires no changes. We do recommend, however, the addition of six inspection days in February for Red to conduct inspections in Germany.

We foresee no significant changes in our position on the Yugoslav situation in the short term. We will participate in Pact member joint exercises (Hungary, Bulgaria, and Romania), if invited. However, this will involve only token forces to demonstrate Pact solidarity without sending a message of serious intent to intervene militarily in Yugoslavia. Forces that would be sent would consist of mostly combat service support (CSS) units, such as transport, medical, engineers, etc., and no more than a single combat maneuver regiment per exercise.

Diplomatic efforts--to include use of the United Nations forum, diplomatic appeals and warning, economic incentives, and psychological operations in Europe, the USA, and the Third World would be applied to dissuade the US and other European countries from interfering in

Yugoslavian internal affairs. No saber-rattling with any Pact forces would be used, other than the continuation of normal training exercises within neighboring countries.

With that, Red notified Blue (via Control) of its intent to conduct declared-site ground inspections of three German armored divisions on February 2 for 2 days, on February 9 for 4 days, and on February 24 for 3 days. It also requested two nondeclared-site inspections, once again in Germany, on February 7 for 3 days and on February 16 for 3 days. In comparison with the pattern of overhead coverage established during December and January, Red altered its NTM pattern for February to cover different hexes in Germany, but Red's overall effort throughout February was still focused predominantly on Germany.

• Blue Team

When the Blue Team reported for game play on Tuesday morning, May 22, it was presented with a scenario update on developments in the German-Polish and in the Yugoslav crises that was virtually identical to the one Red received at the outset of Move IV. Game time was set at February 1, 1994, as it had been for Red. In view of Red's previous moves, Blue was told that the Soviets and the Poles had rescheduled their joint 10-day military exercise from October of 1944 to mid-May; that the Warsaw Pact had declared a Pactwide air defense exercise for mid-March; and that the joint exercises on Yugoslavia's borders, which had been announced at the Pact's meeting in January, were now scheduled to take place during the first week in March.

Through this scenario update for Move IV, moreover, the Blue Team learned of a speech given by Gorbachev late in January in which the Soviet leader had suggested the possibility that the USSR might halt its withdrawals from eastern Germany and might even consider redeploying those forces to Poland and Czechoslovakia, should the governments there so request. Blue also received reports that Gorbachev was under intense pressure from the Soviet military to take a firm stand against the Germans, especially in view of their organized demonstrations against Soviet troops in the eastern portion of their newly united country. The team discovered that on January 20 and January 25, the USSR had conducted as "alerts" two brief (less than 48 hours each) field training exercises involving forces in eastern Germany. Both exercises were understood to be at or near established CSBM levels for reporting, yet neither was notified in advance or at their start. (Blue was simply finding out here about the actions undertaken by Red in its Move III and Move IV; it should be noted that Red did not believe these alerts exceeded the CSBM thresholds required for notification.)

Following this update, the Blue Team was directed to assess current Soviet compliance with the CFE treaty. Specifically, the team was asked what to make of reports that the Soviets had conducted two alert exercises for their forces in Germany during the past 2 weeks without notifying them. More generally, Blue was asked how to interpret whatever messages the Red Team might be trying to send through the ways in which it had employed nonreduction measures thus far. Furthermore, the Control Team, this time in the guise of the NATO leadership, solicited Blue players' recommendations on how NATO should respond to Soviet and other Warsaw Pact members' moves in both northern and southern Europe. In particular:

- -- Should NATO's own exercise or troop withdrawal schedule be altered in response to recent developments--i.e., beyond Germany's decision to suspend the planned conversion of five brigades from active to reserve status and, possibly, to advance its March reserve callup?
- -- How seriously should NATO take the resurgent Warsaw Pact military activity surrounding the current fractionation of Yugoslavia?
- -- To what extent should the West suspect the USSR of "stirring the pot" in Yugoslavia intentionally, as opposed to being drawn into something (e.g., military exercises with Pact allies on their territory) that the Soviets would prefer to avoid?

In the end, the Blue Team was instructed in its Move IV to devise a new NATO plan for countering Soviet and Pact moves over the next 2 months, employing nonreduction measures to help implement that plan wherever possible.

Blue Move IV

The Blue Team responded to these callenges with a succinct assessment of Soviet capabilities and intentions in both the northern and the southern European crises. Blue judged that the Soviets possessed the capability to stop German interference in Poland and probably had the intent to do so. In Yugoslavia, however, Blue doubted the existence of a Soviet capability (and, by inference, an intention) to intervene militarily in a decisive manner. Blue players contended that the costs would be too high, especially in light of the Ukranian separatist problems in the USSR that had emerged as a new problem area in the scenario update for Move IV.

Imputing no evil motives to the two Soviet military exercises in eastern Germany that were conducted as alerts without being notified, the Blue Team assessed them to be consistent with normal training activities and similar to exercises witnessed in the past that were simply designed to keep the troops ready. As for any messages Red might be sending by way of these activities or of nonreduction measures in general, Blue thought that the signals were clear and direct: Red was ready and resolved to oppose German aggressiveness.

How should NATO respond to the Soviet and Warsaw Pact moves? Blue players contended that NATO should not alter the withdrawal schedule it had announced in December but, rather, should apply pressure on Germany: (a) to proceed over the next 5 months with a lowering of readiness levels in the five brigades originally slated to form part of that withdrawal and (b) to stick with its originally announced plan to call up 30,000 reservists in March, rather than alter the size or schedule because of the problems with Poland. In general, Blue advocated increased pressure on Germany (as opposed to the Soviet Union or the Warsaw Pact) as a way of getting it to back off its demands regarding Polish treatment of ethnic Germans.

How seriously should NATO take Pact activity directed toward Yugoslavia? Not very seriously, according to the Blue Team. They argued that military interference could lead to destabilization of that southern European region. Moreover, it was neither practical for the USSR to intervene decisively in

Yugoslavia by itself, nor were Hungary, Romania, and Bulgaria likely to be strong enough to intervene on their own. Blue players deemed it highly unlikely that the USSR was "stirring the pot" in Yugoslavia just to cause trouble there. They considered the potential costs to the Soviets of instability and intervention in that Balkan country to be too high to justify any possible gains.

Finally, the Blue Team put together a new NATO plan for countering Soviet and Pact moves over the next 2 months, as requested. They decided upon continued monitoring of the course of events with NTM and with CFE inspections on a regular, routinized basis, according to the strategy for distributing such inspections throughout the year that they had adopted earlier--i.e., after subtracting 5 percent from their annual quota of CFE inspections in each country for an end-of-the-year reserve, they planned to use one-twelfth of the remaining number of inspection days per country every month. To this end, Blue planned to announce in February that it wished to inspect the Pact exercises near the borders of Yugoslavia that had previously been notified (in mid-January, 42 days in advance) for early March. Blue decided to use CFE aerial inspections for these exercises, with the UK overflying the territory (a CFAW hexagon) in Hungary where one of these joint exercises was scheduled to take place, France doing the same for the exercise in Romania, and Italy covering the one in Bulgaria. Blue also planned for the US to overfly a selected area in the USSR and for Turkey to conduct a CSBM inspection in Albania to look for possible connections between the events and activities occurring in and around Yugoslavia.

The Blue Team agreed to Red's request in Move IV for two nondeclared-site inspections in Germany during February. Blue requested one such inspection itself for February 28-of the area in the Baltic Military District of the USSR to which the Soviet division scheduled to move out of Germany during February was supposed to be going--to which Red agreed. Correspondingly, for February 16 in Germany, the Blue Team requested a declared-site inspection of the hexagon from which that same unit was scheduled to be departing.

Blue also requested two aerial inspections of hexes in Poland on February 10 and February 16. In addition, it liberally spread its remaining number of inspections days for February, calculated according to the distribution strategy noted above, among units in Czechoslovakia, Bulgaria, Hungary, Romania, and the USSR, which consumed the lion's share. At the same time, the Blue Team planned an active and varied pattern of NTM sweeps throughout eastern Europe. During the first week in February, Blue focused its NTM on Hungary, Romania, and Bulgaria; during the second week, on Soviet territory near these countries; during the third week, on Poland again; and during the last week, on Soviet territory opposite Poland.

Section V. THE FIFTH AND LAST MOVE

Move V, which is recounted in this section, was the last one that either team played during the NoREDs game. The Red Team addressed itself to this move on Tuesday afternoon, May 22, and the Blue Team reacted on Wednesday morning, May 23. Move V was addressed to the third hypothesis presented above. Its purpose was to see if, indeed, nonreduction measures help eliminate the ability to launch a surprise attack or provide ample warning in advance of impending large-scale offensive operations.

To test this hypothesis, it was deemed sufficient for game purposes to see whether the Red Team could successfully mount a buildup under the cloak of deception without Blue discovering that development until it was fairly far advanced. According to the game plan, it did not matter where this deceptive buildup took place—in northern Europe or in the south. The key issue was whether it could occur on a credible basis, despite the existence and widespread use of nonreduction measures. Copies of the scenario update and instructions provided to each team can be found in Appendix H.

A. Red Team

This move began with the presentation to the players of a "News Flash" dated February 3, 1994. It announced that, during the past 24 hours, the Soviet leadership had changed. President Gorbachev was no longer heading the USSR; he was out of power. Instead, a troika, one of whose three members consisted of a military official, was now running the Soviet Union. According to the news flash, further details of the power shift were unavailable at that time.

Red's fifth move was scheduled to begin on February 4, 1994, and the players were informed that, except for the change in Soviet leadership just announced, not much had changed in the scenario since February 1, when they played their previous move. The Americans and the French were reporting some initial, procedural success in their efforts to get talks going between the Poles and the Germans on minority issues. Although not much had changed in the German position, which still included suspending the deactivation of five brigades announced in December, their NATO allies had succeeded in pressuring the Germans into sticking with their planned reserve callup as originally notified (30,000 in March). Activist German demonstrators still remained encamped around Soviet garrisons in eastern Germany.

Ethnic violence and demonstrations accompanied by renewed demands for independence had broken out in the Ukraine during the past few days. Some press commentators were even speculating that this eruption of domestic tensions, which had seemed predictable (and thus preventable earlier on) had served as the catalyst for Gorbachev's untimely departure from power.

In Yugoslavia, what was left of national unity continued to deteriorate at an accelerating rate. Both the Croats and the Slovenes had begun forming national militias, largely comprised of ethnic deserters from the Yugoslavian Army. That army was in disarray in northern Yugoslavia; in the south, it was heavily involved in fighting Albanian guerrillas in Kosovo, control of which it looked like the Serbian-dominated army was about to lose. The Serbians, who still controlled the government in Belgrade, were hard pressed simply to

maintain the authority of the national government, much less deal effectively with Croatian and Slovenian separatists. Serbian leaders were desperately appealing for help to the USSR and any other Warsaw Pact members who might be able to help them soon.

After receiving the scenario update, the Red Team was informed that the new ruling troika in the USSR had reached an important decision. Unlike so many eastern European countries before it, the troika declared, Yugoslavia should not be allowed to fall into further disarray and dismemberment, which might work to the West's advantage. Like the USSR, the troika noted, Yugoslavia was a multinational, multiethnic country with a communist heritage. As a result, its unity should be preserved in the face of resurgent nationalisms.

The troika proclaimed itself committed to preserving the USSR by repressing the recent outbreak of separatism in the Ukraine and by setting an example in the process that would deter further such moves both there and elsewhere in the future. Support for the Serbs in Yugoslavia was consistent with this commitment, the troika contended, as well as a further example of the kind of national and international disorder that would no longer be tolerated by the Soviet Union. Moreover, the troika could no longer ignore the Serbian military, which had been trained and equipped in the USSR and was now pleading for help along with their government. "We will not abandon them as we abandoned their East German counterparts to Western influence several year ago," a spokesman for the troika declared.

In response to repeated requests from the legal, Serbian-led government of Yugoslavia, therefore, the troika announced to the Red Team that it had decided to intervene militarily in Yugoslavia, if necessary, to:

- -- backstop and help the Serbs regain control of the country and of events:
- -- preempt and forestall any Western military support for the breakaway regions of Croatia and Slovenia;
- -- welcome a reunited Yugoslavia into a reinvigorated and expanded Warsaw Pact once the intervention had been successfully undertaken.

Red was then ordered to prepare the plan for a limited Soviet intervention in Yugoslavia. To avoid any preemptive moves by the US or NATO, the troika cautioned that the planned operation must be a surprise, with the maximum possible deception maintained for as long as possible. Even though in practice Red might have to violate the CFE and CSBM measures to accomplish its mission, the players were instructed to employ those measures as tools for deception to gain the maximum possible advantage. They were told, for example, to make use of the joint exercises planned with Romania, Hungary, and Bulgaria and already notified for early March to help mask their preparations for the intervention.

The troika provided the Red Team with certain planning assumptions as well. They were told to count on a cooperative attitude on the part of Romania, Hungary, and Bulgaria, but not necessarily full knowledge of Soviet intentions with regard to intervention. At a minimum, Red players were to

assume that, even if the other countries' troops did not accompany Soviet forces into Yugoslavia, they would at least not oppose such a Soviet intervention.

Red players were also asked to consider the possibility of military activities aimed against Germany in the north, as a way a distracting attention from Red's true intentions in the south. The troika stated its belief that German pressure on Poland was about to subside, thanks largely to the commanding military position still maintained by Soviet forces in eastern Germany. The troika also announced its intention to stop the announced withdrawals and to maintain Soviet military forces in Germany indefinitely, once the intervention into Yugoslavia had occurred.

If deception planning for Yugoslavia required further adherence to the schedule of troop withdrawals from Germany, however, the troika favored such adherence. It declared itself willing to permit Red players to do whatever they thought necessary, short of actually initiating combat, to distract attention from Soviet and Warsaw Pact activities in the south by preoccupying the NATO powers and their forces in the north. At the same time, the troika enjoined the Red Team to ensure that they allocated sufficient forces to deal with the budding separatist movement in the Ukraine. Indeed, the troika observed, military activities in the Ukraine could also have the deceptive effect of diverting attention from Red's interventionist objectives in Yugoslavia.

Proposed Red Move V

The Red Team responded with a plan that envisaged an immediate invitation to the Serbian government in Yugoslavia to join the Warsaw Pact. Red wished to make such membership a quid pro quo for any Soviet aid. They conceived of the prospective intervention by Soviet military forces into Yugoslavia as a limited operation to aid the Serbian-controlled army in the most unsettled provinces; its purpose was to provide rear area security, primarily, that would free the Serbian forces to carry out pacification and nation-building activities elsewhere in those provinces. Red understood this Soviet military action to be limited both in scope and in time--i.e., it was crisis support for the Serbian government, not a long-term commitment to police Yugoslavia's provinces or republics.

Given this conception of the operation, the Red Team wanted to time the announcement of Yugoslavia's membership in the Warsaw Pact carefully. It proposed that the announcement be made in mid-February, preferably on a Saturday, to catch other governments' bureaucracies off guard. The intervention was to occur after that announcement, within 12 hours. Soviet deputy foreign and defense ministers were to be conducting visits to Bonn during the approximate time of the intervention. These emissaries would carry messages of reassurance regarding Soviet intentions toward NATO and toward Germany itself. They would stress Soviet support for the legitimacy of the sovereign government of Yugoslavia and reemphasize the limited scope and duration of Soviet military intervention in support of that sovereign government.

The intervention was to be limited to airborne and air assault forces and to special forces (Spetsnaz), with approximately four to five airborne

regiments and one brigade of special forces. They would be deployed to the key troubled regions of Croatia, Slovenia, and Kosovo--to a major center and to subsidiary centers in each province. Airborne and special forces are ideal for this limited military aid to Yugoslavia, Red argued, because they are available within hours (they are kept at very high readiness levels) and they provide fast deployment with minimal warning. The tactical missions of these forces were to be worked out by the General Staff with an eye to the situation in Yugoslavia and the ongoing operations of the Serbian army in the field. That army would monitor all borders. Soviet forces would have the right to control the port of Split on the Adriatic for reinforcements, if necessary.

Airborne forces not deployed to Yugoslavia according to this plan, regional motorized rifle and tank forces, and—most importantly—Soviet Ministry for Internal Affairs (MVD) forces were judged to be adequate to monitor unrest in troubled areas of the USSR, notably the Ukraine. Combat support and combat service support units sufficient to support two Soviet heavy divisions were to begin trickling into Hungary in the middle of February under the guise of preparing for the forthcoming joint Hungarian and Soviet field training exercise in early March. Such units, in addition to others moving into Romania and Bulgaria for the joint exercises planned there, would be available soon after the Soviet intervention in Yugoslavia began and would support it from territories contiguous to its borders.

According to this Red Team plan, the USSR would announce when the intervention commenced that it was indeed a limited-time, limited-scale action that posed no military threat to NATO or neutral countries. In keeping with the Soviets' avowed intent not to be provocative, as well as with the previous Soviet record of compliance with CFE and other arms control accords, the USSR would make no changes to its announced inspection or exercise schedules and would not alter its scheduled troop withdrawals from eastern Germany. Soviet military forces, particularly those in Germany, were expected to balance increased watchfulness and alertness to a potential reaction against them in Germany with the need to avoid any appearance of mobilization or provocative action. The planned introduction of airborne, air assault, and special operations forces into Yugoslavia was not considered to be a violation of CFE, since the units involved had been deployed beyond the Urals before the CFE treaty was signed and they were not, after all, redeploying onto territory covered by that agreement.

While admiring the elegant simplicity and directness of this Red Team plan, the Control Team decided that it did not quite fit the original game plan as far as the NoREDs game was concerned. In effect, it presented the Blue Team with a fait accompli, which took advantage of the element of surprise, to be sure, but not necessarily of the cloak of deception that the troika had urged the Red Team to employ. In order for Blue to have a pattern of deception to deal with, as well as for the game to be able to test the hypothesis about nonreduction measures and deception discussed above, a different Red move seemed necessary.

In conducting the test game a week earlier at CAA, the instructions to the Red Team for Move V must have been more clearly directed toward planning for the possibility, versus the inevitability, of intervention, for the earlier Red move had involved a good deal of deception. It was introduced, first, to

the current Red Team as an alternative to their plan and identified to them as a plan that had been developed in the Soviet Foreign Ministry to compete for the troika's attention and support. After considering it briefly, the Red players decided that the Foreign Ministry's alternative agreed broadly with their own plan, albeit with minor differences resulting from the military and strategic imperatives of operational planning. They used this as an argument for adopting their plan. That argument did not convince the Control Team, but the opportunity to make it, at least, served to keep the current Red Team "in the game," so to speak, even if their preferred option was not the one selected in the end.

Actual Red Move V

To keep Blue in the game, the Control Team decided to proceed with the move proposed by the previous Red Team, although it modified that move with some elements of the current Red Team's proposal and some changes of its own. (See Appendix I for the full text of the first Red Team's move paper.) The move began with an announcement by Red that the USSR was accelerating the departure of its remaining units from Germany. Ostensibly, this was a positive step being taken in response to the ending of the German-Polish crisis. Actually, Red was using the move to paint as peaceful a picture of itself as possible, thereby hoping to aid its deception efforts with respect to Yugoslavia, and to create a bulge in its military transportation traffic that could also be used to help cover a Yugoslav intervention.

The essence of Red's move, however, consisted of deploying Soviet forces to Yugoslavia's borders with Romania, Bulgaria, and, especially, Hungary in a partly covert manner and of generating sufficient traffic volumes in the USSR's Carpathian Military District to mask such deployments. Hence, for the joint exercises announced by the Warsaw Pact's Political Consultation Committee in January for early March, no more than a single combat maneuver regiment of Soviet forces per exercise were scheduled to deploy to Bulgaria, Romania, and Hungary; one joint exercise had been announced for each country. Furthermore, the Soviet regiments earmarked for these exercises were to travel via the Carpathian Military District. In each case, the other three regiments belonging to the same division as the regiment participating in the announced exercise would also move into the various nost countries and participate in separate but unannounced exercises.

In other words, there would be four joint exercises taking place in each country, but each would be separated from its neighboring Soviet regiments' exercise areas. The parent division's headquarters and associated division-level units would remain in the USSR to bolster, if necessary, claims that the exercises were separate from each other. The Red Team planned to announce each of these additional exercises, even though—depending on the level of Bulgarian, Romanian, and Hungarian participation in each case—they might have fallen below the threshold requirement for notification (i.e., one division, consisting of at least two regiments or brigades), but to refuse any Western requests to inspect or observe them on the grounds that no declared sites were involved. The Control Team, however, decided not to announce any of these added exercises in order to increase the scope of the deception being attempted.

To increase the military "noise" level in the Carpathian District, the Red Team planned to have all the regiments participating in these exercises pass through that district, to stage an alert exercise for one of the divisions already stationed there, and to allow Western inspections of this exercise if requested. Red also planned to call up a reserve division each in the Carpathian, Odessa, and Byelorussian Military Districts but to keep this under the 40,000-troop threshold requiring notification of such activities 42 days in advance.

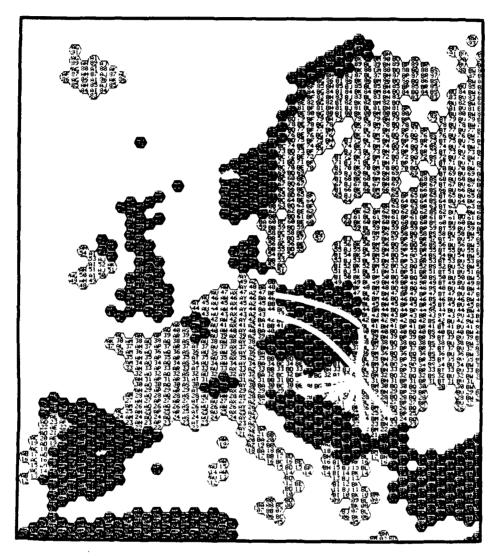


Figure 4. Red Move V - Soviet Forces Move from Eastern Germany to Yugoslavia's Borders via the Carpathian Military District

Into the "noisy" Carpathian Military District, units withdrawing from eastern Germany in March 1994 would move --according to the accelerated withdrawal schedule announced by Red at the outset of this move, which would make an additional division from Germany available for Yugoslavia--but then they would surreptitiously redeploy into Bulgaria, Romania, and Hungary to locations near the exercise areas previously announced. These (regimental) units would take advantage of all means available to cover their tracks,

including the possibility of forsaking unit integrity if necessary to maintain deception. Through such moves, Red intended to have approximately 5 divisions, or 15 regiments' worth, of ground combat power and at least 3 squadrons of aircraft poised on Yugoslavia's border for a potential invasion, while (thanks to the Control Team) only announcing the presence of 3 regiments in the area. In addition, Red planned to begin intensive training activities for airborne units behind the Urals; to deceive Western intelligence sources about the intent of such activities, if detected—even though they would be taking place outside the CFE area; and to introduce 3,000 or more troops from those units into Yugoslavia in the event of an intervention there.

B. Blue Team

When the Blue Team convened for its final move on Wednesday, May 23, it was immediately informed about the change in Soviet leadership that had occurred on February 3, with Gorbachev having been replaced by the troika. Blue also learned that it was now March 1, 1994, as far as the game was concerned, and that the troika consisted of the heads of the Communist Party, the KGB, and the Defense Ministry. Gorbachev was reported to have suffered a stroke and to be hospitalized. The troika was reported to be serving as a collective presidency while he was incapacitated. Ethnic violence and demonstrations accompanied by renewed demands for independence had broken out in the Ukraine, with some intelligence analysts speculating that this development had served as the catalyst for Gorbachev's sudden illness (or, at least, for his sudden departure from the scene). In responding to the uprising in the Ukraine, the troika had already laid claim to Gorbachev's power to rule by decree, if necessary.

Elsewhere, Blue was told, the Americans and the French were reporting some successes in their efforts to get talks going between the Poles and the Germans on minority issues. The NATO allies had succeeded in pressuring the Germans into sticking with their reserve callup as originally notified (30,000 in March), and now that talks with the Poles seemed imminent, the Germans were speaking about "postponing" temporarily, versus "suspending," the transfer of five active brigades to the reserves. Meanwhile, the German police had peacefully removed scores of demonstrators encamped around Soviet military garrisons in eastern Germany. In response to the relaxation of Polish-German pressures, the USSR had announced an acceleration of its withdrawals from eastern Germany, moving up the departure times for units scheduled to leave in March and in May (none was scheduled for April) to February and March, respectively. The Soviets were also reported to have turned down Polish requests to restation the departing forces in Poland.

In Yugoslavia, Blue discovered next, national unity was continuing to deteriorate at an accelerating rate. Both the Croats and Slovenes had begun forming national militias, largely out of ethnic deserters from the Yugoslavian Army. That army was not only in disarray in the north but bogged down in fighting Albanian guerrillas to the south, in Kosovo, control of which appeared to be up for grabs. The Serbians, who still controlled the government in Belgrade and the army, were approaching desperation and appealing for help to the USSR, as well as any other Warsaw Pact members who might be able to assist them soon. They had come to believe that the US and NATO, having already written them off, now sought to take advantage of the breakup

of Yugoslavia. The central government in Belgrade had even taken the unprecedented step of applying to join the Warsaw Pact, in hopes that this would bring them tangible support and benefits immediately.

Blue was also told that the Soviet Union and other Pact members had yet to act formally on the Yugoslavian request for membership. The players were reminded, however, that ever since the Pact meeting in Warsaw in mid-January. the USSR and its partners had been planning joint exercises in support of Serbian-led Yugoslavia for the first week in March. As notified in advance under the Stockholm Document's CSBM requirements, these joint military activities were scheduled to consist of: one exercise apiece. in excess of 13,000 troops/300 tanks, in Hungary, Romania, and Bulgaria with Soviet participation (a regiment) in each case. Blue learned that Soviet Deputy Foreign and Defense Ministers had been traveling through western Europe during mid-February, not only to convey messages of reassurance regarding Soviet intentions toward NATO and Germany but also to stress Soviet support for the sovereignty and integrity of Yugoslavia. They were warning that western recognition of break-away republics could only be seen as a destabilizing aid to insurrection, and they were calling for joint east-west mediation efforts to help resolve the issue.

Having been provided with this scenario update, the Blue Team was asked to address the following questions:

- Assess the state-of-play in northern Europe
 - Why is the new Soviet leadership accelerating the withdrawal of their forces from Germany?
 - -- Because they view the German threat as having ended once and for all (they think that NATO has now demonstrated its ability to control the Germans)?
 - -- Because they need these forces back home right away to deal with ethnic upheavals of the kind they are facing in the Ukraine?
 - -- Because they need the forces back home so that they can dedicate other forces to helping Yugoslavia remain united?
 - How stable is the military situation for NATO during February and March in view of all the movement being undertaken by Soviet troops in Germany?
- Monitor and evaluate developments in southern Europe
 - What are the Soviets and other Warsaw Pact members seeking to accomplish by holding joint exercises on Yugoslavia's borders?
 - Should such exercises worry NATO? If not, why not; if so, what should NATO be doing in response to them?
 - What do you see as the Soviet Union's and the Warsaw Pact's capabilities and intentions with regard to Yugoslavia?

To help it answer these questions, the Blue Team was informed that it could conduct inspections to see what was going on in both parts of Europe on a near-real-time basis. For Blue's move, in other words, the speed at which CFAW had been running-i.e., 6-25 minutes of scenario time would pass in CFAW for every 1 minute that actually transpired during the game, depending on what ratio the Control Team selected for a given move--was being accelerated to approximately 90 minutes of CFAW time for every 1 minute of game time. With the increase in speed, players could expect that more than 3 days would elapse in CFAW during 1 hour of game play. This meant that they could put requests to CFAW for information from inspections or NTM and expect to receive it during the game itself, without having to wait overnight or between moves as they had earlier in the game.

Blue Move V

The Blue Team responded to the enhanced capability afforded by speeding up CFAW with requests for ground-based, declared-site inspections of two Soviet divisions in eastern Germany. The two divisions specified were scheduled to return to the USSR-one in February, the other in March-according to the accelerated withdrawal plan announced by the Red Team during its move. Blue also requested nondeclared-site inspections on the ground in Poland and the USSR to examine the areas to which Red had said those two divisions were deploying. The Control Team, acting on behalf of the Red Team, granted the nondeclared-site request for Poland but denied the one for the USSR on the grounds that it involved the Ukraine, which was currently experiencing internal strife. The Blue Team accepted this without complaint.

Blue declared its intent to conduct three simultaneous aerial inspections of Soviet forces in Poland early in March 1994 and decided to make use of the Stockholm Document's ground inspection provisions to investigate the joint exercises that the Warsaw Pact had notified for Bulgaria, Romania, and Hungary. Blue included requests for CFE aerial inspections of those countries. Meanwhile, the Blue Team directed its NTM coverage toward the western military districts of the USSR, by and large, as well as to the Odessa district in the south. On balance, the overall Blue pattern of inspections appeared to derive from attempts to maintain the CFE compliance—monitoring strategy developed by the team earlier in the game; to confirm that Soviet withdrawals from Germany were continuing and that the crisis over Poland had indeed past; and to keep track of the Warsaw Pact exercises previously announced for Romania, Bulgaria, and Hungary.

Faced with what looked like a business-as-usual approach by Blue, the Control Team intervened with additional intelligence on the movement of Soviet forces--specifically, with information on the arrival in particular hexagons of forces that were already on the move. Such data was described to the Blue Team as a unique form of national intelligence, a special category of the kind of information they were accustomed to receiving as national intelligence. In fact, Control was supplying Blue with force movement updates that only the Red Team would have been entitled to receive if it had still been playing the game and tracking the progress of the redeployments it had initiated.

Reported among this intelligence, which included information on the progress of units whose movement Red had announced to Blue (e.g., the units

withdrawing from Germany; the three regiments participating in the Warsaw Pact exercises bordering Yugoslavia), were the movements of forces that had not been previously notified by Red. Some of the Soviet forces that were surreptitiously building up for the possibility of intervention in Yugoslavia, in other words, were included in this "special" national intelligence. The purpose of providing it to Blue at this point in the game was to see if it might move the team closer to an appreciation of what Red was really trying to do.

Toward the very end, it appeared to the Control Team that Blue might be on the verge of uncovering the pattern of deception that Red had created with respect to Yugoslavia. Hence, Control allowed the Blue move to continue beyond its scheduled termination point. Time became a factor, however, as the need to conclude the game because of other schedules eventually began to intrude on the Blue Team's further play. Finally, Control had to call a halt to Blue's move and ask for presentation of its move paper--i.e., its answers to the questions raised above.

The Blue Team responded by assessing the Soviets' accelerated withdrawal from eastern Germany to be the result of the need, in part, to use the troops back home in the USSR and, in part, to have them available as a contingency force for the Yugoslav crisis. Blue judged that the current military situation for NATO in central Europe was "very stable." Despite the additional movements being undertaken by Soviet forces in Germany, Blue believed those troops were continuing to leave Germany and were doing so at an accelerated rate. Moreover, there were no new exercises scheduled.

With regard to developments in and around Yugoslavia, Blue concluded that the Soviets were trying to control the border areas around that disintegrating state and, with their participation in the joint Warsaw Pact exercises, to be in a position to influence events. Blue players even expressed the opinion that the USSR was participating in order to prevent Bulgarian, Hungarian, or Romanian involvement in Yugoslavia. In response to the question of whether such exercises should worry NATO, Blue said no, they should not, although NATO should continue to monitor the situation.

Blue believed that the Soviets wanted to show continued support for the integrity of Yugoslavia as a country and noted that the Warsaw Pact had not yet embraced Yugoslavia as a member. On balance, the Blue Team assessed Soviet capabilities for intervention in Yugoslavia as limited, given the logistical problems of supporting Soviet forces in Yugoslavia so far from their homeland as well as the internal problems posed by unrest in the Ukraine. As for intentions, Blue judged them to be similarly limited to promoting greater stability for the region.

In the end, the Blue Team failed to detect the full scope and intent of the capabilities that the Red Team was developing near the borders of Yugoslavia. Whether yet more time for additional information gathering would have changed Blue's perceptions of the situation is debatable. On the one hand, Blue seemed close to discovering the pattern of troop movements that Red was trying to conceal. On the other, Blue seemed predisposed to believe that an invasion seemed out of the question for a variety of reasons—political, strategic, operational, logistic—and that if it did occur, it would represent a fundamental error in Soviet policymaking ("another

Afghanistan"). Hence, Blue dismissed the possibility of intervention as illadvised and thus considered it unlikely. This assessment might have continued to color Blue's interpretation of the information it was receiving, even if more time had been available.

Section VI. CONCLUDING OBSERVATIONS

This section contains observations, impressions, and insights drawn from the May 1990 game at CAA and the NoREDs Study as a whole. These collected reflections are organized into three parts. The first of these focuses on what the conduct and the outcome of the game revealed about the three hypotheses it was designed to test. The second part features observations on the use of CFAW for gaming NoREDs—on whether that wartime model's contributions were worth the effort involved in adapting it to what was essentially a peacetime/crisis task. Finally, the third part of this section addresses the proposed NoREDs themselves; it lays out various "lessons" that may have been learned as a result of both the game and the study.

About Hypotheses

The first hypothesis being tested by the game was that, in peacetime, nonreduction measures would operate as intended to indicate that parties to the CFE agreement were in compliance with it, and acting in good faith, when that was indeed the case. The game tended to suggest that this hypothesis was correct. Evidence derived from one run of a game, of course, cannot be regarded as definitive. In this case, in particular, the input data ascribed by the Control Team to the ground, air, and overhead verification provisions (e.g., up to 90 percent, 85 percent, and 80 percent effectiveness, respectively) may have dictated the output in terms of the foregoing judgment about this hypothesis. Different inputs, presumably based on empirical research that would indicate how the effectiveness data should be improved, might produce different outputs and a different conclusion.

Nevertheless, as far as this one game and its data are concerned, the players on both teams believed that they could adequately monitor the state of the other side's compliance with the CFE treaty. They could do so because they had been provided with data on treaty-limited items and forces that was certified (by the Control Team) to be correct as of the end of the reductions phase of a CFE agreement. Given that data and the tools for monitoring further changes, as provided via CFAW, the players considered that they had the verification problem under control in a peacetime environment.

Even when the game's scenario escalated into a crisis, the players seemed to maintain confidence in their ability to monitor those aspects of the CFE agreement having to do with reductions. As the crisis escalated, such confidence appeared to extend to both teams' use of the various nonreduction measures not only to monitor forces on the other side but also to keep track of that side's military activities and to send political-military signals designed to clarify issues related to the crisis. The players were demonstrating, in other words, that the second hypothesis, which was being tested in the later moves, might also be supportable--subject, of course, to the caveats discussed above in connection with the first hypothesis. This was, after all, only one game. Additional iterations of it would be required in order to render more definitive judgments.

The second hypothesis was that, in a crisis, NoREDs will signal nonhostile intent effectively when that is the case. For the most part, the measures performed this function well during the third and fourth moves of the game, although some problems did arise. The Red Team, for example, tried to use

its inspections to single out Germany, targeting German forces for inspection but not those of its allies (even allied forces in the same hexagon), and Blue missed this signal. The crisis itself caused a lot of distractions, thus making it harder than in peacetime to read messages intended to be conveyed by NoREDs alone. It put a premium on activity-monitoring, for one thing; this may have diverted attention from other pursuits (e.g., TLE monitoring) or, at least, diluted it, since much more activity was taking place than in peacetime. This fact alone should probably serve as an additional caveat to the observation reported above, namely, that the players felt confident in their ability to monitor compliance during the initial crisis escalation.

According to the third hypothesis, NoREDs should help deter or unmask a deception if one side is considering a surprise attack or large-scale offensive. In the NoREDs game at CAA, the Red Team succeeded in preparing a potential intervention of Soviet forces into Yugoslavia while keeping the Blue Team in the dark about what was actually happening. To be sure, if the Blue Team had had more time available for its last move, it might have figured out what Red was positioning its forces to be able to do. As noted above, game time was becoming scarce during Blue's last move; in the end, the Control Team was compelled to halt game play in order to conclude the remainder of the exercise on schedule.

Nevertheless, Blue had sufficient information available to it when the game was halted to be able to render a judgment on what Red was doing, and Blue failed to make that judgment. Based on this (one) game, therefore, the third hypothesis cannot be confirmed. Although the particular measures involved in the NoREDs game did not appear to make the Red Team's deceptive tasks any easier than they might have been otherwise, neither did they themselves deter Red from attempting the deception nor help Blue unmask it in timely fashion. Possible reasons for this lack of effect are discussed below, in the subsection devoted to observations about the NoREDs measures themselves.

About CFAW

Use of CAA's CFAW Model in the NoREDs political-military game resulted in the successful adaptation of an existing resource to new types of research. CFAW helped the Control Team approximate a dynamic post-CFE environment in realistic fashion. It supplied unit locations, inventories, and movements that served not only as credible but also as efficient means for controlling the large amounts of data that CFE involves.

The intelligence assets of CFAW--the ground, air, and overhead capabilities explained earlier--also functioned reasonably well. One might argue with the values assigned to the different assets employed in the NoREDs game, but the ability to model such assets credibly with CFAW--not the validity of the particular values chosen this time--is what the game demonstrated.

The players complained about information overload during the game and called for some way to reduce it. The Blue Team in particular felt the need for an intelligence analyst as a member of its team—to help keep track of and interpret all the data that was being generated during the course of the game by their activities, by those of the other team, and by CFAW.

Nevertheless, both teams welcomed CFAW's ability to impart versimilitude to the study of CFE. They applauded it as a training device that could help analysts better understand the implications of new measures they might be planning to propose, as well as the interactions of current measures in and with a relatively concrete political-military context.

The Control Team concluded that Blue's request for an intelligence analyst or even an intelligence "cell" on its team seemed justified, especially since the Red Team, which was composed entirely of intelligence analysts, had much less difficulty dealing with all the information at its disposal. The Control Team also observed that, if necessary, it could be responsible itself for producing the Red Team's move. After all, Control had come up with the alternative to the plan initially proposed by the Red Team in Move V. Although Control had benefited in this regard from a previous Red Team's work in the test game, consolidation of the Red Team into the Control Team would make it possible to run the game over a shorter period by reducing the time required for the Red Team to construct its moves. Even though the number of Blue moves might remain the same, more iterations of the game for Blue players might be easier to arrange if play were compressed into 3 straight days, rather than 3 out of 5.

● About NoRE2s

As for the proposed measures themselves, the NoREDs game at CAA suggested that the quota system for inspections and the distances involved in eastern Europe and the USSR would ultimately force predictable tradeoffs among the various inspection measures being negotiated. NTM will still play a work-horse role for East and West alike, since such assets are exempt from any quotas and subject only to the requirement that interference with them should be avoided. Even if they are less accurate than any ground or aerial inspection regimes likely to be negotiated, NTM will always be on call when other assets are unavailable and may even serve as cueing devices for targeting ground or aerial inspections to take a closer look in specific cases.

While declared-site ground inspections may be potentially the most accurate verification tools being negotiated, such inspections generally take more time than the other measures to produce results. In a crisis, aerial inspections, which take less time and cover more territory, could tend to be called on in preference to ground inspections, even though the information they obtain may be less accurate. If the NoREDs game at CAA provides any quide to future use, it seems likely that declared-site ground inspections will carry most of the burden of monitoring compliance with the force reductions mandated by the CFE treaty. In the event of a crisis, however, attention may tend to shift more toward monitoring military activities than to force levels. If so (and it happened to some extent in the NoREDs game), this will place premiums on inspection capabilities that go beyond declaredsite boundaries. NTM, of course, represent one such capability. Nondeclared-site ground inspections represent another, although they are subject to the right of refusal by the other side. Aerial inspections are the third wide-ranging option, one that the NoREDs game suggests will see increasing use as a crisis develops.

The NoREDs game also suggests that current thresholds for notification of significant military activities may be too high. Most CSBM and proposed CFE thresholds have been established at the level of a division. In practical terms, this means that at least two brigades or regiments of a division have to be operating in conjunction with the division headquarters for the threshold to be activated and the reporting requirements of CSBMs or CFE stabilizing measures to be invoked.

In the NoREDs game, however, the Red Team was able to achieve deception successfully by moving its forces around at the regimental level, beneath established divisional thresholds. With no requirement to notify military activities at regimental levels, Red was relatively free to concentrate its regiments—individually but close together—on the borders of Yugoslavia in preparation for an intervention. Blue noticed only 2 or 3 (out of the 14) Soviet regiments that were moving into Bulgaria, Romania, and Hungary in the NoREDs game.

In theory, the stabilizing measure providing for notification of movements in excess of 600 tanks, 1,200 armored combat vehicles, and 400 artillery should have triggered a notification in this case. It did not because both teams playing the game considered the measure to be ill-defined in terms of whether such movement had to be for a common purpose, must take place under the same operational command, or could include any combination of a country's forces, anywhere they might exist (e.g., Soviet forces both in eastern Germany and the USSR). Hence, both teams tended to ignore this measure in favor of those that were more precisely defined, such as the CSBMs and the other CFE stabilizing measures.

To the extent that the evidence from one NoREDs game can be trusted on this point, it may be significant that Red built its deception plan in Move V around the use of regiments. It selected that echelon because it fell below established thresholds, as noted above. A determined opponent bent on surprise and deception will always look for such "loopholes," of course, and it may prove difficult to cover all of the possibilities in advance in a CFE treaty.

What may make this "loophole" particularly significant in this case, however, is that CFE will establish new and lower force levels throughout Europe. These will, in turn, have cascading effects on training, on exercises, and on how states think about what constitutes militarily significant levels of force. In such a recalibration, regiments and brigades may come of occupy positions of prominence and potential utility comparable to those accorded divisions in former times and conditions. For this reason, if nothing else, the Red Team's fixation on regimental echelons in the NoREDs game may be worth noting.

Finally, it should be observed that it was difficult to generate east-west scenarios for the NoREDs game that could credibly accommodate a transition from peace, to crisis, to a potential conflict. In the northern European case, both sides worked harder to communicate to each other their mutual interest in isolating and curbing German and Polish ambitions than they did to prepare for possible conflict over these ambitions. In southern Europe, neither team believed its interests were threatened to such an extent that it would ever, willingly, contemplate the use of force in Yugoslavia (recall that Red had to be directed to do this by Control).

This poses no small problem for future NoREDs games, as it does for studies of peace and stability on the European continent in general. Despite the difficulty involved in trying to push crisis escalation scenarios to extremes in post-Cold War Europe, however, the effort must be made. Continuing to think about the ways in which a CFE agreement could go wrong, as well as how it might be improved, is still a good way to guard against the possibility of unexpected, destabilizing, or security-threatening developments in the future.

One conclusion of this research study, therefore, is that more such efforts should be undertaken. Gaming provides a useful environment for studying NoREDs, and more games would clearly help expand the scope, the depth, and the generalizability of this research effort, as well as of its findings. Additional NoREDs games could focus on different hypotheses individually—e.g., they could revisit iteratively the issue of whether prospects for successful deception and surprise can be diminished by such measures—or they can be combined together as here. Over time, the accumulated results of various clusters of NoREDs games would establish a data base from which to draw more definitive conclusions about the likely effects of different measures than it has been possible to reach here. In the meantime, the observations, impressions, and insights, as well as the framework and methodology, presented in this study aim to provide a helpful first step down what should be an ongoing research path.

APPENDIX A

STUDY CONTRIBUTORS

Special acknowledgement is due to the Conventional Arms Control Negotiations Division (DAMO-SSC), the US Army Staff office that sponsored the NoREDs Study. In particular, the current and former chiefs of that office, Colonel Karl Lowe and retired Colonel Ralph Hallenback deserve thanks and recognition for their interest in launching the study, monitoring its progress, and contributing to its completion in a variety of supportive ways.

Recognition and thanks are also due to the US government officials who participated in the NoREDs game at CAA during May 1990. These individuals are listed below. To ensure free play, one ground rule of NoREDs, as of most political-military games, was that the players themselves would not be associated publicly with specific aspects of the game. Hence, both the team membership and the institutional affiliation of the NoREDs players have been omitted from the following list.

Margot Berray
Paul Gebhardt
Andrew Hamilton
Robert Haworth
Philip Hockensmith
Warren Wagner

Dr. Richard E. Darilek, a researcher from the RAND Corporation serving as Distinguished Visiting Analyst at CAA throughout 1990, conceived and directed the NoREDs Study. As study director, he would like to acknowledge and give special thanks to CAA staff members Mr. Russell Pritchard, MAJ Michael Grabowski, USA, and Mr. John Willoughby for their sustained, untiring, and ultimately successful efforts to adapt CAA's Contingency Force Analysis Wargame (CFAW) to the purposes of the NoREDs game.

Special thanks also extend to current and former members of the CAA staff who, in one way or another, participated in the game or helped make it possible: LTC Dorn Crawford, USA, LTC Harry Golding, USA, Mr. William Johnson, CPT Jon Moriarty, USA, CPT Eric Stebbins, USA, Mr. John DePalma, Mr. Robert Hart, LTC Jeffrey Paulus, USA, Ms. Erci Stern, COL Milivoj Tratensek, USA, and COL James Wilmeth, USA.

Finally, the study director would like to thank Mr. John Setear and Mr. Kenneth Watman of the Arroyo Center/Army Research Division at the RAND Corporation for their timely contributions to and support for the effort to conduct a NoREDs game at CAA.

AUTHOR'S NOTE

Dr. Richard E. Darilek has served as Distinguished Visiting Analyst (DVA) at the US Army Concepts Analysis Agency (CAA) since August 1989. Upon completion of his tour as DVA in March 1991, he will rejoin the RAND Corporation in its Washington, DC office as a member of the Senior Research staff.

Prior to his arrival at CAA, Dr. Darilek was Director of the Policy and Strategy Program in the Arroyo Center/Army Research Division of the RAND Corporation at its headquarters in Santa Monica, California. He had also served there as Associate Head of the Behavioral Sciences Department. Dr. Darilek joined RAND in 1982 after completing his tenure as both an International Affairs Fellow of the Council on Foreign Relations in New York and a Visiting Fellow at the International Institute for Strategic Studies in London (1981-1982).

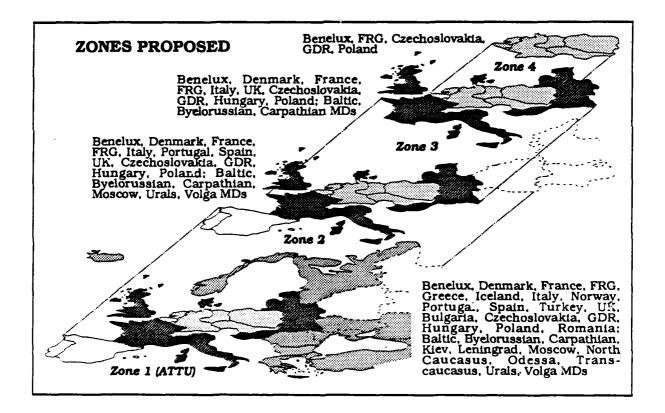
From 1979 to 1981, Dr. Darilek directed the US Department of Defense Task Force on Mutual and Balanced Force Reductions. Prior to that assignment, he served as a Special Assistant in the Office of the Secretary of Defense (OSD). Dr. Darilek came to OSD in 1976 from his previous position as an Assistant Professor of History at Herbert H. Lehman College of the City University of New York, where he taught from 1971 to 1976.

Dr. Darilek holds an MA and a PhD in history from Princeton University in Princeton, New Jersey. His BA is from Rice University in Houston, Texas. He is the author of a book, <u>A Loyal Opposition in Time of War: The Republican Party and the Politics of Foreign Policy from Pearl Harbor to Yalta</u> (Westport Conn: Greenwood Press, 1976), various RAND studies, and numerous other publications on US defense and foreign policy.

APPENDIX B

SCOPE OF REDUCTIONS - NATO PROPOSALS AS OF MAY 1990

		F	DRCE LIMI	TS		
Item	Cumulative Regional Cellings					
	Alliance (Zone 1)	Zone 2*	Zone 3°	Zone 4*	Sufficiency	Stationed*
Tanks	20000	11300	10300	8000	12000	3200
Artillery	16500	9000	7800	4500	9900	1700
ACV	30000**	20000	18000	11000	16800	6000
Helicopters	1900				1140	
Aircraft	4700***				2820	
Manpower						195000***
≤ 14000 AIFV, 3000 HACV *apply only to active forces					**US, USSR in 'central zone'	
***plus 500 'defense interceptors'					30000 US 'elecwhere'	



APPENDIX C

NOREDS GAME PLAN

DAY 1 - PRELIMINARIES

- -- Blue and Red Teams assemble together.
- -- Both teams are briefed on an overview of the game, its assumptions, and the opening scenario.

• Game Overview

- Objective: to simulate with human players and realistic tools the likely functioning of CFE's nonreduction measures (NoREDs) in practice and in peacetime, once a CFE treaty is fully in force.
- Team Identities: Blue represents a NATO international military staff group responsible for planning and coordinating NATO countries' implementation of the CFE agreement. Red represents a Soviet military planning and implementation team that coordinates with other Warsaw Pact countries' military planners.
 - Schedule: five moves over 4 days; explain times for each team.

Assumptions

- Brief the CFE treaty provisions on reductions and on NoREDs as they are going to be played in the game.
- Explain that the game takes place after conventional force reductions mandated by the CFE treaty have occurred, i.e., 3 years after signature of the treaty.
- Note that German unification with continued membership in NATO is taken as an accomplished fact.

• Opening Scenario

- Time is November 1993. Elimination of excess treaty-limited items to achieve parity in the various categories has occurred in the 3 years since signature of a CFE agreement in December 1990. CFE verification measures have helped establish a record of full compliance by all.
- In October 1993, the USSR announced that it would withdraw.all of its troops remaining in Germany by June 1995. The withdrawn forces would return to the Soviet Union.
- In early November 1993, many NATO allies, including the US, welcomed the Soviet move by announcing that they, too, would make additional cuts in their forces in Europe.
- German unification is scheduled to be finalized on January 1, 1994, with formal incorporation of the East German Laender into the FRG. On

that date, the Warsaw Pact will lose East Germany as a member for good, although for CFE purposes, the FRG has already incorporated former East German forces into its allowable totals and reporting requirements.

- By 1993, the Warsaw Pact is more of a political alliance responsible for administering the CFE agreement and negotiating possible follow-ons to it than it is a military organization. Only Poland and Bulgaria retain any military ties at all to the USSR. These manifest themselves occasionally in joint exercises. Czechoslovakia, Hungary, and Romania only take part in the Pact's political consultative committee and CFE activities.
- There is considerable turmoil in the Balkans, as Serbian and Albanian groups within Yugoslavia clash frequently in conflicts that are beginning to mark the region as a 1990s version of Lebanon in the 1980s. Taking advantage of the violence south of them, Croatians and Slovenes within Yugoslavia are on the verge of establishing of their own independent, noncommunist states. They have hopes of obtaining Western recognition and support, but officially, both NATO and Warsaw Pact governments are in favor of preserving the independence and territorial integrity of Yugoslavia.

DAY 1 - MOVE 1

- -- The annual CFE data exchange for 1994 is due on December 15, 1993. Each country has to provide every other treaty signatory with order-of-battle-like data on its forces in the CFE region. In addition, under the Stockholm CSBM agreement, they have to provide a calendar of their major military activities for the forthcoming year.
- Red Team: Establish a plan for Soviet forces in Eastern Germany to deploy to the USSR over the next 128 months, as promised in October. Provide necessary details of that plan (e.g., which units will move from where to where during the next year) in the annual data exchange for 1994.
- Blue Team: Draft a plan for cutting NATO's forces equitably in response to the withdrawals announced by the USSR. Identify units and equipment to be eliminated, removed, or stored in a format capable of being included in the annual data exchange for 1994.

DAY 1 - MOVE 2

-- Time is December 16, 1993. Both sides (i.e., all parties to the CFE agreement) have received the annual data exchange from each other.

• Scenario Update:

- With formal unification only 2 weeks away, the German government is already taking its new status for granted. It has energized its continuing talks with Poland and Czechoslovakia over the rights of German minorities in those countries with offers of much-needed investment commitments by German banks. The Germans are asking for language and political representation concessions in exchange for their investment offers.

- In the Balkans, the Serbs have asked the Warsaw Pact to support their efforts to subdue the other dissident nationalities (Albanians, Croatians, and Slovenes). Indications are that the Serbs are seeking more than simply further diplomatic pressure.
- Red Team: Upon receipt of the Blue Team's data on forces and activities planned for 1994, put together a strategy for conducting the inspections your side will be allowed to conduct throughout the year. How will you divide up and allocate the limited number of inspection opportunities available to you? Where and when will you conduct your first several inspections of the year?
- Blue Team: Similarly, upon receipt of Red Team data, construct a strategy for verifying it over the coming year and specify your first several inspection targets.

DAY 2 - MOVE 3

-- Time is mid-January 1994. Each side receives reports from any inspection activities conducted up to this point.

• Scenario Update:

- To induce both teams to launch additional "challenge" inspections during this move, the Control Team introduces anomalies into the force structures or activities of both sides.
- Both the Polish and the Czech governments have turned down flatly the new, formally united Germany's proposal for guaranteeing German minority rights in their countries. The Germans are upset at this out-of-hand rejection. Instead of offering economic carrots to gain their objectives, they are switching over to economic sticks by threatening to cancel loans and other financial commitments previously negotiated. The Soviet Union and other members of the Warsaw Pact have supported the Poles and the Czechs in their responses to the Germans.
- In response to repeated Serbian appeals for assistance as well as support in the Balkans, the Warsaw Pact's Political Consultative Committee (its main forum these days) is meeting to decide what actions its members might take to help the beleaguered Serbs. Meanwhile, NATO's North Atlantic Council has warned publicly against any outside intervention in Yugoslavia's developing civil war.
- Red Team: Digest feedback from any inspections conducted early in January 1994. Launch challenge inspections to investigate anomalies in Blue's forces and activities.
 - Blue Team: Same.

DAY 2 - MOVE 4

-- Time is approximately 6 months later, in June 1994. Red and Blue will play this move sequentially, with Red playing first and Blue responding to

Red's move. In practice, Blue's response (i.e., Blue's Move 4) will likely be played on Day 3 (after Red's Move 4 has been completed on Day 2).

• Scenario Update:

- Germany has stepped up its economic pressure on Poland and Czechoslovakia. The Germans seem firmly resolved to gain concessions on behalf of the German minorities in both countries. In response to this German pressure, the USSR has supported the Poles and the Czechs, at their request, by announcing a temporary suspension of the unilateral withdrawal of Soviet forces from the eastern part of Germany. One consequence has been a variety of demonstrations around Soviet bases in Germany, some of which have featured rock-throwing skinheads and other forms of violence. The German government has also asked its NATO allies for contingency approval to increase the size of the Bundeswehr relative to other allied forces within the CFE ceilings.
- Yugoslavia is virtually a war zone between the Serbs and Albanians. The Croatians and the Slovenes have declared their independence from Belgrade, and several Western countries are rumored to be on the verge of recognizing them. Alarmed by these developments, several Warsaw Pact members--Hungary, Romania, and Bulgaria--have announced that they will be conducting joint military exercises involving participation by Soviet forces near the borders of Yugoslavia.
- Red Team: Devise a plan for returning Soviet forces from the USSR to eastern Germany, if necessary, and/or from eastern Germany to western Poland (the Poles have proposed this as a way of ultimately securing their interests against the Germans). In addition, come up with a plan for Soviet participation in Hungarian, Romanian, and Bulgarian exercises to take place near the frontiers of those countries with Yugoslavia. You can assume that these countries will allow unhindered passage to Soviet troops for this purpose. Investigate any questionable German or NATO military activity.
- Blue Team: React to Red's plans for halting or redeploying forces to eastern Germany or western Poland. In addition, respond to Soviet and Warsaw Pact plans for force movements and military activities in the Balkans. Plan how to cope with these developments in terms of (a) NATO force deployments or activities and (b) use of the arms control inspection regime to get a better idea of what is going on and whether agreements are being observed.

DAY 3 - MOVE 5

-- Time is approximately 6 more months later, in December 1994. Red and Blue will again play this move sequentially, with Red playing first (on Day 3 itself) and Blue responding to Red's move afterwards (most likely on Day 4).

• Scenario Update:

- There has been a change in the Soviet leadership. Gorbachev is out and a troika, one of which is a military leader, is collectively running the Soviet presidency until a new president can be decided upon.

- Soviet forces have remained stationed in eastern Germany and at least one Soviet division is now stationed in western Poland (whether that division came from Germany or the USSR depends on what the Red Team decided in Move 4). The Soviets claim that a potential buildup of German forces beyond their original CFE levels nullifies the previously announced Soviet withdrawal from eastern Germany or from Poland. The Poles agree. Germany has, in fact, started to increase the size and the activity level of the Bundeswehr in response to the continued Soviet presence on German and abutting Polish territory.
- In response to the unusual pattern of military exercises on Yugoslavia's borders by the USSR in cooperation with Hungary, Romania, and Bulgaria, Western countries initially refrained from recognizing Croatia and Slovenia as independent states and stuck to the traditional NATO position in support of Yugoslavia's territorial integrity. Following the Pact military exercises, Albanian and Serbian clashes also subsided somewhat, but now they have flared up again, and the Serbs seem harder pressed than ever to hold the country together. Germany, in retaliation for Soviet activity in support of Poland in the north, is on the verge of extending diplomatic recognition to Croatia in the south.
- Red Team: Prepare a new series of military exercises on the borders of Yugoslavia. Assume a cooperative attitude on the part of Hungary, Romania, and Bulgaria, as experienced last time. This time, however, and unbeknownst to them or anyone else until the last possible minute, Soviet forces participating in the exercises should be sufficient to cross into Yugoslavia and support the Serbs, who have requested such assistance for their efforts to gain control of the country. In other words, the exercises should mask a limited intervention. To avoid any preemptive moves by the US or NATO, the operation must be initiated with maximum possible deception for as long as possible. Therefore, keep the West distracted over Jermany in the north while you prepare your military move in the south.
- Blue Team: Respond to notifications of new Warsaw Pact exercises on Yugoslavia's borders, as well as continued Soviet activities in Germany and Poland. Determine what is going on in both places. Is there any more cause for concern in either place than there was during the preceding move?

DAY 4 - WRAP-UP

Since the Blue Team's move probably had to take place on the morning of Day 4, the wrap-up session to go over what happened in this game will most likely be held on the afternoon of Day 4.

APPENDIX D NOREDS PLAYER INFORMATION BRIEFING (MOVE I)

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Conventional Arms Control in Europe: The Role of Non-Reduction Measures (NoREDs)

- Objective: To understand the effects on compliance and stability, once CFE reductions have occurred, of ongoing NoREDs:
 - -- Information exchanges
 - -- Stabilizing measures
 - -- CSBMs
 - -- Monitoring/verification provisions
- Method: Game NoREDs to explore interactive dynamics (e.g., NATO-Pact) in various post-CFE environments (e.g., peacetime versus crisis)
 - -- Adapt CAA's Contingency Force Analysis Wargame (CFAW) to the task
- Scope: Top-level overview of NoREDs from perspective of US/NATO and Soviet/Pact planners and decisionmakers
 - -- Attempts to answer the question of "How is the overall NoREDs regime likely to work in practice?"





Gaming NoREDs with CFAW at CAA

- Focus is on a political-military game that pits a Blue (NATO) team against a Red (Soviet/Pact) team
- · CFAW furnishes an automated game board:
 - -- A map of Europe from the Atlantic to the Urals divided into hexagons with sides 30 miles long and a center-to-center distance of 50 miles
 - Representation of Red and Blue units down to brigade and regiment levels for all CFE participants
 - Time and distance calculators for simulating movement of units throughout Europe
 - Terrain features that affect unit mobility rates across and between hexes
 - -- Day, night, and weather variables
 - -- Special "intelligence" capabilities for performing monitoring tasks

(2)



Who is Who?

- · Blue Team:
 - -A NATO international military staff group responsible for planning and coordinating implementation of the CFE agreement among NATO members
- · Red Team:
 - A Soviet military planning and implementation team that coordinates with the military planners of other Warsaw Pact members

(3)

Scenario for Move I



Significant Developments as of November 1993

- George Bush and Mikhali Gorbachev still hold the office of President in their respective countries.
 - Gorbachev's attempts to accelerate economic Perestrolka have consistently run into conservative resistance in the U.S.S.R.
 - Separatist efforts and Baitic common market hopes have been stalled by intense Soviet pressure, including the presence of Soviet forces in the Baitic republics.
 - -Nevertheless, separatist efforts are still rife, e.g., in the Ukraine.
 - Soviet forces have completed their withdrawals from Hungary and Czechoslovakia, but dissatisfaction grows over lack of housing for those returning from East Europe.
- Poland has been experiencing severe labor unrest and inflation resulting form its "shock therapy" conversion to a market economy.
 - German minorities in western Poland are protesting that they are being laid off ahead
 of less productive Polish workers as inefficient industries seek to trim the workforce.
- The Balkans have become a trouble spot once again:
 - Serbs and Albanians are locked in ethnic conflict over control of Kosovo.
 - Croatians and Slovenes are clamoring for independence.
 - Serbian nationalists have gained control of the central government in Belgrade.





Scenario for Move I -- Continued

Further Developments in Europe as of November 1993

- German unification achieved by 1992
 - Unified Germany remains a member of NATO but not of the Warsaw Pact.
 - Only Soviet military forces are present in eastern Germany (i.e., the former GDR) - - not German military (as opposed to police) or other NATO forces.
 - The new Germany has taken an active role in promoting the rights of German minority communities in various Warsaw Pact countries (e.g., Poland, Czechosiovakia, Hungary, and Romania).
- The Warsaw Pact, now down to six members, is more of a political alliance than it is a military one.
 - Only Poland and Bulgaria still take part in periodic Pact military exercises.
 - Czechoslovakia, Hungary, and Romania only participate in foreign ministers' meetings.
- In October 1993, the U.S.S.R. announced withdrawal of all remaining Soviet forces from eastern Germany by 1995, at the latest (vs 1999, as provided in 2+4 treaty).
- Responding to this Soviet announcement, the U.S. and other NATO allies have individually announced intentions to further reduce their forces in Europe.

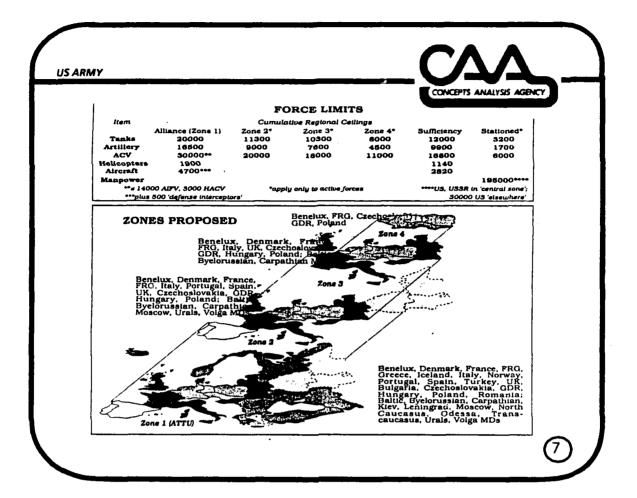




CFE Scenario for Move I

Conventional Armed Forces in Europe (CFE)

- Time is now November 1993.
- CFE agreement signed in November 1990 and ratified soon afterwards (by summer of 1991) by all 23 signatory states (16 NATO, 7 Warsaw Pact).
- By January 1994, implementation of reductions mandated by CFE will be complete.
 - Evidence thus far suggests that both sides have taken the reductions required and are in compliance with the CFE treaty.
- Annual data exchanges are due by mid-December 1993, to include:
 - What forces remain in the area and where?
 - Any changes in force structure during 1994?
 - Any significant military activities planned?





Annual Forecasts of Planned Military Activities

(to be included in annual data exchanges at year's end)

- Any military activity involving more than 40,000 troops or 800 main battle tanks
 - must be notified at least 12 months in advance
 - can only be conducted once within a 2-year period
 - [- participants on both sides are eligible to notify and conduct such an activity in (late) 1994]
- · A calendar of planned military activities subject to prior notification (42 days in advance
 - - see following charts) during the forthcoming year, to include:
 - general characteristics and type of activity;
 - location and duration (start and end dates) of activity;
 - states participating and level(s) of command involved;
 - numbers and types of troops/units/TLE engaged;
 - participation of air forces if more than 200 sorties by aircraft, excluding helicopters, planned.



Notifiable Military Activities - I (subject to notification 42 days in advance)

- A call-up of reservists that exceeds 40,000, which requires notification of:
 - Number of reservists involved
 - Designation of units affected
 - Location of unites affected
 - Purpose of call-up
 - Duration of call-up
- Any movement of treaty-limited equipment, within 14 days, that exceeds:
 - 600 Main Battle Tanks
 - 400 Artillery
 - 1200 Armored Combat Vehicles (ACVs)

(9)



Notifiable Military Activities - II (subject to notification 42 Days in advance)

- Any coordinated military exercise, movement, or concentration of land forces that exceeds
 - 13,000 troops

or

- 300 battle tanks
- If organized into a divisional structure or at least two brigades/regiments not necessarily subordinate to the same division
- Any amphibious landing or parachute assault by airborne forces that exceeds 3,000 troops
- Exception: Whenever these military activities are carried out without advance notice to the troops involved (i.e., as "alerts"), notification will be given upon commencement of such activities

(10)



Changes in Organizational Structures or Force Levels

- Any change in organizational structure expected to last at least one year should be notified 42 days in advance.
- Any addition of formations or units (battallon/squadron or above) expected to last at least one year should be notified 42 days in advance.
- Changes of 10% or more in the peacetime authorized strength of personnel or Treaty-Limited Equipment (TLE) should be reported as they occur.





Move I

CFE Annual Data Exchange

What to Provide by December 15, 1993

- Red
 - Recommend changes to current data that would fulfill Soviet promise to remove forces from eastern Germany by 1995
 - -- i.e., which units should move where; when should they move?
 - Furnish an annual calendar of notifiable exercises to be conducted during 1994
 - - indicate where, when, and who will participate in each exercise
- Blue
 - Recommend ways to take additional reductions of NATO forces promised by individual national leaders in response to announced Soviet withdrawals
 - Furnish an annual calendar of notifiable exercises to be conducted during 1994
 - - Indicate where, when, and who will participate in each exercise



APPENDIX E NOREDS MOVE II INSTRUCTIONAL BRIEFING

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Scenario for Move II

Europe as of December 16, 1993

- In response to worker unrest in western Poland, Germany has energized its continuing talks with Poland over rights of German minorities there.
 - The Germans are seeking not only economic but also language and political (e.g., special voting district) concessions for the German minority in Poland.
 - They are offering increased investments and loans in exchange.
 - The Poles are resisting, to the point of using armed forces to curb demonstrations organized by local Germans in Poland.
- Serbs have asked both NATO and Warsaw Pact members to help them maintain Yugoslavia's status and territorial integrity as an unified country.
 - The situation is worsening in the south, with the Albanians, as well as in the north, with the Croats and the Slovenes who seem bent on separatism
 - In a joint declaration by their foreign ministers, Warsaw Pact members have responded with a strong statement of support for the Serbian position.
 - NATO's response is less strong, since many of its members sympathize with Croatian and Slovenian desires for independence.



CFE Scenario for Move II

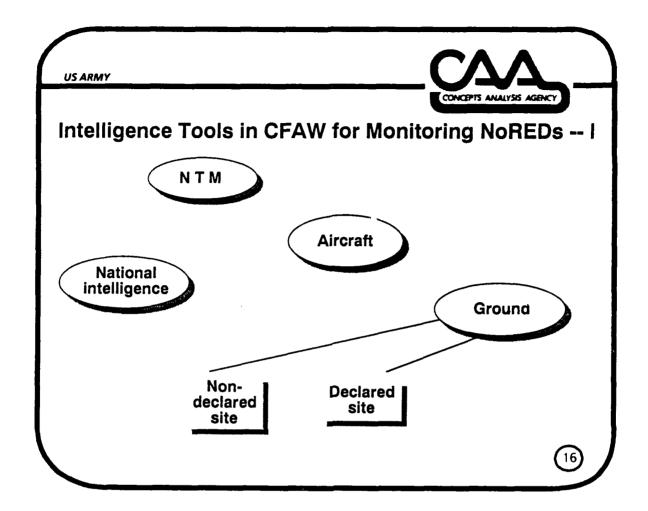
Conventional Armed Forces in Europe (CFE)

- Time now is December 16, 1993.
- · Each side has received annual data exchange documents from the other side.
- · Status of inspection quotas remaining on both sides is such that:
 - up to 14 inspection days are available for the Blue Team to inspect the U.S.S.R.;
 up to 3 days remain for inspecting Soviet forces stationed in Germany;
 up to 5 days each can be used to inspect other East bloc participants.
 - up to 8 inspection days remain for the Red Team to inspect forces in Germany;
 up to 2 days each can be used to inspect other NATO participants.
 - Note: this is a "use them or iose them" (end-of-the-year) situation for inspections.



Notification of Intent-to-Inspect

- inspecting party decides when and where (which hexagon) to inspect, subject to quotas
- · Inspected party has 2 hours to respond
- · Inspected party cannot deny Inspection of a "declared" site
 - i.e., where TLE is or has been located, or where activities notified in advance are being conducted
- · Inspected party can deny an inspection of a "nondeclared" site
 - Either upon receiving Notification of Intent-to-inspect, or when the inspecting team arrives in a hexagon





Intelligence Tools in CFAW for Monitoring NoREDs -- II

- National or Multinational Technical Means
 - -- Currently provide readout (from overhead sources) for up to 20 hexagons per week with 80% effectiveness.
- Air inspections (whether CFE or Open Skies)
 - -- Require 16 hours from notification of intent-to-inspect for aircraft to arrive in hexagons (stipulated in NATO CFE proposal)
 - -- Currently require 18 hours (6 on ground, 12 in air) from arrival in hexagon to report of inspection, with 85% effectiveness in best case (60% at night and with snow)
- Ground Inspections
 - -- Following notification of intent-to-inspect, CFAW calculates time for movement of inspecting units to designated hexagons
 - -- For declared sites, once inspecting unit arrives in hexagon, current time for report of first inspection is 24 hours, with 90% effectiveness for that and all subsequent reports (at 24 hour intervels up to 10 days, as NATO proposes)
 - -- For undeclared sites, once inspecting unit arrives in hexagon, current time for report of first inspection is 24 hours, with 50% probability of detecting a unit within that period (plus an added probability of detection keyed to unity activity levels), and 85% effectivness for units that are detected
- · National intelligence
 - -- Provides random information on other side's forces at 24-hour intervals
 - -- Înformation is 24 hours old.





INSPECTION QUOTAS

- Active quota (maximum number of inspection days each participant has available to conduct inspections), which can be shared on a side.
- Passive quota (maximum number of inspection days each participant has to accept being inspected by others)
 - Subject to a forumula based on TLE and territory
- No more than four inspections can take place in any one country at the same time
- Free inspection days allowed for every notified activity
 - I.e., days required for inspection of that activity do not count against quotas.

ARMY		(
Passive l	Inspection Quot	as for 1994 U	CONCEPTS ANALYSIS AGENCY
• NATO	Country Belgium	Quota (No. of Days)	
	Denmark	10	
	France	40	
	Germany	175	
	Greece	30	
	iceland	6	
	Italy	40	
	Luxembourg	5	
	Netherlands	21	
	Norway	15	
	Portugai	10	
	Spain	30	
	Turkey	40	
	United Kingdom	25	
		16	
• Pact	Bulgaria	16 30	
	Czechoslovakia	30 20	
	Hungary	20 30	
	Potend	30 20	_
	Romania Soviet Union	305	(
	Soviet Forces in Germa		•



What Should Both Teams Provide by January 1, 1994?

- Any requests for inspections to be conducted between now (December 16, 1994) and the end of the year.
- · A strategy for conducting inspections during 1994:
 - How to spread available quotas throughout the year (e.g., percentages of inspection days by quarters)?
 - When and where to conduct specific inspections during January 1994?
- Take into account changes in force structure, announced by both the East and the West, that are represented in the annual data exchanges just received.

(20)



Blue and Red Teams -- Move II

- Initiate any inspections to be conducted before January 1, 1994.
 - Fill out an "Inspections" form for these inspections.
 - Recommend policy to be followed if a non-designated site inspection is refused.
 - Fill out requests for NTM intelligence during two remaining weeks in December.
 - Pass forms, recommendations, and requests to Control Team.
- Develop an overall strategy for conducting inspections during 1994.
 - Decide how to spread available quotas throughout the year (e.g., determine number of inspection days per country by quarter).
 - Summarize strategy and pass to Control Team.
- Plan where and when to conduct specific inspections during January 1994.
 - Fill out new "inspections" forms for these inspections.
 - Plan requests for NTM intelligence during January; fill out request forms.
- Recommend policy for dealing with other side's requests for non-designated-site inspections.
 - Summarize policy and pass to Control Team.
- Review other side's notifications of intent-to-inspect (to be provided by Control Team)
 - Decide whether to refuse any non-designated-site inspections.
 - Pass decisions on any inspections to be denied back to Control Team.

APPENDIX F NOREDS MOVE III UPDATE BRIEFING

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Scenario for Move III

- Time is now January 16, 1994.
- Northern Europe
 - Poland has repeatedly rejected various German offers of increased economic aid in exchange for concessions to German minorities.
 - Upset by both official and unofficial support for these minorities coming from Germany, Poland restricts border crossings between the two states.
 - Instead of offering economic carrots, a frustrated German government is now threatening to cancel loans and withdraw previous financial commitments.
 - -Germany responds to Polish border closings with a strong diplomatic protest and an increase in the alert levels of its border police.
 - The U.S.S.R. and all other members of the Warsaw Pact have affirmed their support for Poland's position.
 - The Pact's Political Consultative Committee (Foreign Ministers) is now meeting in Warsaw to discuss further responses to Germany.
- · Southern Europe
 - The Pact meeting in Warsaw is also considering the latest Serbian appeals for support in view of mounting unrest in Kosovo, Croatia, and Slovenia, which threatens to tear Yugoslavia apart.
 - NATO has warned publicly against any external interference in Yugoslavia's internal affairs (which seem to be moving toward all-out civil war).





Blue Team -- Move III

- · Develop and recommend a political-military strategy. In view of:
 - Growing tensions between Germany versus Poland and, now, other members of the Warsaw Pact including the U.S.S.R.
 - -- A probability of civil war in Yugoslavia, with declarations of independence by Croatia, Slovenia, continued conflict between Serbs and Albanians in Kosovo, and (again) the possibility of Soviet/Pact support of the status quo ante vs. ethnic self-determination.
- NATO agrees that dramatic military actions are not called for at present, and that any military responses to further
 developments, which prudence may require, should be measured and non-belligerent there is no need for
 saber-rattling (yet); even the Germans tentatively agree on this point at this time.
- Nevertheless, there are things we might be able to do in an arms control context that could help serve our objectives in
 this situation, which are to remain on guard in case Pact/Soviet capabilities or intentions change for the worse while
 showing that we ourselves are exercising restraint.
- You should develop a strategy, complete with the steps we need to take over the next several weeks to implement it,
 that employs whatever CFE and other arms control tools are available to demonstrate both our resolve to resist
 pressure and our determination not to be caught off guard, as well as our restraint in the face of whatever the
 Pact/Soviets are threatening. Examples of options to consider:
 - the "creative" use of military exercises to show resolve and/or restraint;
 - similar use of arms control provisions requiring advance notification of varions military activities;
 - redeployments of forward-based (or other) forces;
 - aggressive use of CFE and other "inspection" possibilities.
- Review your previously recommended strategy for conducting inspections throughtout 1994 and your list of
 inspections to be undertaken during January and Into February; make any changes required as a result of the
 current situation -- in particular, any changes in inspections to be conducted later this month and next.
- Review reports from inspections conducted in late December 1993 and early January 1944, as well as other intelligence
 information, and assess what they tell us about the capabilities and intentions of Soviet and Pact military forces up
 to this point.



Red Move -- III

General Assessment by Soviet Leadership

We believe that Germany remains a bigger threat to Soviet interests at present than the Yugoslavian problem. German actions to date do not require any dramatic military actions, however, and we wish to be able to say to the rest of the world that German actions—not Soviet reactions—are clearly the problem. Political rather than military measures must therefore carry the burden of containing the Germans, who have a historical tendency towards aggression that has harmed all peoples (including the Germans). There is a good chance of Warsaw Pact solidarity on many of these issues, given the East European's fears of German aggression.

We believe that Yugoslavia's Warsaw Pact neighbors, Romania, Hungary, and Bulgaria ("RH&B"), can and will take the lead in helping the Serbs. We should secretly encourage RH&B to provide covert assistance—advisors, weapons, training exchanges—to the Serbians, and we should be receptive to what the RH&B recommend that we do. Diplomatically, we should overtly support the Serbs as the current leaders of a legitimate national government, and we believe that the Pact as a whole can be persuaded to do so at the PCC as well. We should offer to mediate the Yugoslavian difficulties, emphasizing that the Soviet Union has much experience with the Slavio peoples and has in the past few years met many challenges involving minority nationalities. We are also open to participating jointly with other mediators as well.



Red Team -- Move III (Continued)

- · Further Guidance from the Leadership:
 - Some military measures should be taken for the sake of prudence. Such military responses to the current situation should be measured and unbelligerent. There is no need for saber-rattling (yet). The limited military measures are intended to fit in with the overall strategy: isolate the Germans.
 - There is no change to the force data submitted for 1994. The withdrawal of all Soviet units from eastern Germany will continue to proceed as already announced on precisely the same schedule. (We think that the Germans are unlikely to try anything major until we have left at the end of the year, that there would be plenty of units left until well into 1994, and that changing the withdrawal plans would be an overreaction.)
 - —There are things we might be able to do in an arms control context, however, that could help serve our objectives in this situation, which are to remain on our guard in case German/NATO capabilities or intentions change for the worse while showing that we ourselves are exercising restraint.
 - You should develop a strategy, complete with the steps we need to take over the next several weeks to implement it, that employs whatever CFE and other arms control tools are available to demonstrate both our resolve to resist German pressure and our determination not to be caugh off guard, as well as our restraint in the face of whatever the Germans are threatening. Examples of options that you should consider here are:
 - the "creative" use of military exercises to show resolve and/or restraint;
 - similar use of arms control provisions requiring notification in advance of various military activities;
 - -- redeployments of forward-based (or other) forces:
 - aggressive use of CFE and other "inspection" possibilities.
 - Review your previously recommended strategy for conducting inspections throughtout 1994 and your list of inspections to be undertaken during January; make any changes required as a result of the current situation in particular, any changes in inspections to be conducted later this month.
 - Review reports from inspections conducted in late December 1993 and early January 1944, as well as other Intelligence information, and assess what they tell us about the capabilities and intentions of German and NATO military forces up to this point.



APPENDIX G NOREDS MOVE IV SCENARIO AND INSTRUCTIONS

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Scenario for Move IV -- Red Team (Northern Europe)

- Poland's "none of your business" response has angered the German Government, which has increased its pressure on Poland with a combination of steps designed to demonstrate resolve and to produce concessions:
 - Economically, the Germans have cancelled some loans, as threatened, and announced that they are withholding delivery of aid promised to Poland until their demand for talks on the issue of minority rights in Poland is met by the Pollsh government;
 - Politically, the Germans have enlisted selected allies (the U.S. and France) to act as go-betweens for them with the Poles and their supporters (e.g., all the other Pact members)
 - -- in the German view, the U.S. and French role is to get the Poles and others to "listen to reason" on the minority issue and make concessions;
 - within eastern Germany, the German government has also permitted (some say, encouraged) organized demonstrations around remaining Soviet military bases;
 - In one incident at Dresden, civilian German demonstrators and Soviet military personnel had a confrontation that turned violent when the Soviets used tear gas to disperse the crowd gathered outside their garrison.
 - Militarily, Germany has announced suspension of its plans, notified via the annual CFE data exchange in December 1993, to convert 5 German brigades from active to reserve status in April 1994
 - the Germans are also taiking about moving the call-up of 30,000 reservists originally notified for March 1994 to sometime in February.
- Following its Political Consultative Committee Meeting in mid-January, the Warsaw Pact announced that its members would be conducting additional military exercises:
 - In particular, the Soviets and the Poles rescheduled their joint 10-day military exercise from October 1994 to mid-May, and the Pact declared a Pact-wide air-defense exercise for mid-March.





Scenario for Move IV -- Red Team (Southern Europe)

- Yugoslavia is becoming a war zone, with Serbian nationalists running the army and trying to suppress insurrections and independence movements in Kosovo, Croatia, and Siovenia.
 - Several Western countries (e.g., Italy, Austria, and Germany) are rumored to be on the verge of recognizing Croatia and Slovenia.
 - The Yugoslav army is especially hard-pressed to hold its own against the Albanian uprising in Kosovo, which is being supported by neighboring Albania, newsy emergent as a CSCE member with increasing ties to Western countries (e.g., Turkey).
 - Serblan diplomats are even suggesting that Yugoslavia would join the Warsaw Pact if that would improve its chances of getting help to remain united.
- Concerned by these developments, various Warsaw Pact members have announced plans to carry out joint exercises, on their own territory, with Soviet forces invited to participate.
 - In addition to Bulgaria and Romania, even Hungary is planning to join in these exercises because of the threat to stability (e.g., increasing numbers of refugees, which "restructuring" states can ill afford) inherent in the breakup of Yugoslavia.





Scenario for Move IV -- Red Team (Elsewhere in Europe)

- The United States has contacted France to request that the French ask the Swiss to conduct an inspection in the eastern part of Germany under the auspices of the Stockholm Document (as opposed to the CFE agreement).
 - The U.S. has also asked the French to request that the Swedes conduct a similar such inspection in Western Poland.
- Apart from Germany's talk about advancing the date of its planned call-up in March of 30,000 reservists throughout the country, there have been no changes in the NATO countries' exercise program as notified in December.
- In the western U.S.S.R., Ukranian nationalists have passed a secession declaration comparable to those received from the Baltic states in 1990.
 - it is unclear at this point what next steps these nationalists propose to take; given the "lesson" of the Baitic states, the Ukranians may have something different in mind than anything experienced thus far on this issue.





Move IV -- Red Team CONCEPTS ANALYSIS AGENCY (General Guidance)

- Although the situation in Yugoslavia has clearly worsened, geography and history both compel us to continue to treat the German problem as the larger threat. Indeed, we are willing to remain relatively docile with respect to Yugoslavia if that is the price we must pay for Western support against the Germans. In both north (Germany) and south (Yugoslavia), however, we are basically continuing our previous policies: encourage political rather than military solutions, seek coordination rather than confrontation between Soviet efforts and non-German NATO efforts, and adhere strictly to the CFE and Stockholm agreements in all their particulars.
- We consider U.S. and French involvement as go-betweens for Germany with Poland to be a good sign. We encourage France and America to make good use of their historical ties with the Poles, and to emphasize that France and the U.S. wish to see Poland continue to be politically free and economically strong. We assume that the U.S. and France want to resist German expansionism. We see possible parallels with World War II if the U.S. and France (and other non-German NATO nations) cannot restrain the Germans: Germany is moving against and Poland; Czechoslovakia and Hungary could be next, and France and the Benelux nations might then be next on the list. We do not intend to keep our fears a secret from the rest of the world.
- The Germans' behavior suggests that we should maintain diplomatic relations with them but reduce the intensity of our direct efforts to convince them to check their expansionist tendencies. We should redouble our efforts to convince the non-German NATO nations to contain the Germans. We note that the Western powers of France, the U.S., and the U.K. participated in the 2+4 talks in which the Germans guaranteed that the post-war borders would remain inviolate, and that these Western powers are obligated to take all actions within their power to see that this guarantee is met.
- We do note with regret, however, that the Germans' behavior makes conceivable a situation in which the Polish and/or Czech governments might request the re-stationing of Soviet forces on their territory to deter German aggression. If those governments made such a request, and if the Soviet Union felt that German behavior warranted such re-stationings, then the Soviet Union might agree to re-station some of its forces leaving eastern Germany in Poland and/or Czechoslovakia. Immediately after it made such a decision, the Soviet Union would notify the CFE signatories. This restationing would of course be in accordance with CFE numerical limits, since the forces in eastern Germany would simply be moved to another location in Zone 4.



Move IV -- Red Team

- . Time is now February 1, 1994.
- · Assess Blue's capabilities and intentions as they relate to compliance with the CFE treaty.
 - in particular, assess the uses to which NATO as a whole, appears to have put its pattern of implementation of the entire CFE regime (i.e., including the non-reduction measures) thus far.
 - what message, if any, is Blue trying to convey by this pattern to date?
- Review the military exercises and movements aiready notified to take place between now and the end of March for how well they support Soviet and other Pact members' objectives vis-a=vis
 - Germany
 - Yugoslavia
- Propose any new exercises or movements deemed necessary between now and the end of March.
 - Plan on having to notify the necessary details of any new exercises to other CFE and CSBM participants 42 days in advance of their commencement.
- In developing what amounts to a new political-military game plan, for use over the next two/three
 months, that counters the pressure from Germany in the north of Europe while, in the south,
 make sure that the plan takes into account the need for:
 - Demonstrating strong support for Yugoslavia (and the Serbs);
 - Deterring any NATO or Western Intervention into Yugoslavia;
 - Maintaining compliance with the CFE and other arms control agreements.



Scenario for Move IV -- Blue Team (Northern Europe)

- Poland's "none of your business" response has angered the German Government, which has increased its pressure on Poland with a combination of steps designed to demonstrate resolve and to produce concessions:
 - Economically, the Germans have cancelled some loans, as threatened, and announced that they
 are withholding delivery of aid promised to Poland until their demand for talks on the issue of
 minority rights in Poland is met by the Polish government;
 - Politically, the Germans have enlisted selected ailles (the U.S. and France) to act as go-betweens for them with the Poles and their supporters (e.g., all the other Pact members)
 - in the German view, the U.S. and French role is to get the Poles and others to "listen to reason" on the minority issue and make concessions;
 - within eastern Germany, the German government has also permitted (some say, encouraged) organized demonstrations around remaining Soviet military bases;
 - in one incident at Dresden, civilian German demonstrators and Soviet military personnel had a confrontation that turned violent when the Soviets used tear gas to disperse the crowd gathered outside their garrison.
- Militarily, Germany has announced suspension of its plans, notified via the annual CFE data exchange in December 1993, to convert 5 German brigades from active to reserve status in April 1994.
 - the Germans are also talking about moving the call-up of 30,000 reservists originally notified for March 1994 to sometime in February (lowering the number to avoid notification problems).
- Following its Political Consultative Committee Meeting in mid-January, the Warsaw Pact announced that its members would be conducting additional military exercises:
 - in particular, the Soviets and the Poles rescheduled their joint 10-day military exercise from October 1994 to mid-May, and the Pact declared a Pact-wide air-defense exercise for mid-March.





Scenario for Move IV -- Blue Team (Southern Europe)

- Yugoslavia is becoming a war zone, with Serbian nationalists running the army and trying to suppress insurrections and independence movements in Kosovo, Croatia, and Siovenia.
 - Several Western countries (e.g., Italy, Austria, and Germany) are rumored to be on the verge of recognizing Croatia and Slovenia.
 - The Yugosiav army is especially hard-pressed to hold its own against the Albanian uprising in Kosovo, which is being supported by neighboring Albania, newly emergent as a CSCE member with increasing ties to Western countries (e.g., Turkey).
 - Serblan diplomats are even suggesting that Yugoslavia would join the Warsaw Pact if that would improve its chances of getting help to remain united.
- Energized by these developments, various Warsaw Pact members announced plans at the conclusion of their meeting in January to carry out joint exercises, with Soviet forces invited to participate, during the first week in March.
 - in addition to Bulgaria and Romania, even Hungary is planning to join in these exercises because of the threat to stability (e.g., increasing numbers of refugees, which "restructuring" states can ill afford) inherent in the breakup of Yugoslavia.



Scenario for Move IV -- Blue Team (Elsewhere in Europe)

- The United States has contacted France to request that the French ask the Swiss to conduct an inspection in the eastern part of Germany under the auspices of the Stockholm Document (as opposed to the CFE agreement).
 - The U.S. has also asked the French to request that the Swedes conduct a similar such inspection in Western Poland.
- Apart from Germany's talk about advancing the date of its planned call-up in March of 30,000
 reservists throughout the country, there have been no changes in the NATO countries'
 exercise program as notified in December.
- in the western U.S.S.R., Ukranian hationalists have passed a secession declaration comparable to those received from the Baitic states in 1990.
 - It is unclear at this point what next steps these nationalists propose to take; given the "lesson" of the Baltic states, the Ukranians may have something different in mind than anything experienced thus far on this issue.
- Responding to Polish-German crisis, Gorbachev gave a speech late in January that suggested
 the possibility of the U.S.S.R. halting its withdrawals from eastern Germany or of redeploying
 those forces to Poland and even Czechoslovakia should the governments there so request.
 - It is reported that Gorbachev is under intense pressure from the Soviet military to take a firm stand against the Germans, especially in view of their organized demonstrations against Soviet troops in the eastern portion of their newly united country.
 - It is also reported that the U.S.S.R. conducted two brief (>48 hours apiece) military exercises involving its forces in eastern Gernany on January 20 and January 25; both were at or near established CSBM levels for reporting, yet neither was notified in advance or at their start.



Move IV -- Blue Team

- . Time is now February 1, 1994.
- · Assess Soviet capabilities and intentions in regard to compliance with the CFE treaty.
 - What do you make of the reports that the Soviets conducted two military exercises for their forces in Germany during the past two weeks that they falled to notify?
 - What sorts of messages do you think they are trying to send through their use of CFE's non-reduction measures in the ways that they have employed them thus far?
- How would you recommend that NATO respond to Soviet and other Warsaw Pact members' moves in both northern and southern Europe?
 - Should NATO's own exercise or troop withdrawal schedule be altered in response to recent development i.e., beyond Germany's decision to suspend the planned conversion of 5 brigades from active to reserve status and, possibly, to advance its March reserve call-up?
 - How seriously should we take the resurgent Warsaw Pact military activity surrounding the current fractionation of Yugoslavia?
 - To what extent do you suspect the Soviets of stirring the pot here intentionally versus being drawn into something (e.g., military exercises with Pact ailies on their territory) that they would prefer to avoid?
- Devise a new NATO plan for countering Soviet and Pact moves over the next two months, employing non-reduction measures and tools as the vehicles of choice wherever possible.



APPENDIX H NOREDS MOVE V UPDATE AND INSTRUCTIONS

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! NEWS FLASH!

- The time is now February 3, 1994.
- During the past 24 hours, the Soviet leadership has changed:
 - Gorbachev is out.
 - A trolka, one of which is a military official, is now running the U.S.S.R.;
- Further details of the power shift are unavailable at this time.



Scenario for Move V -- Red Team

- · Northern Europe
 - Except for the change in Soviet leadership, not much has changed in the past 48 hours (i.e., since February 1).
 - The Americans and the French are reporting some initial, procedural success in their efforts to get talks going between the Poles and the Germans on minority issues.
 - substantively, however, not much has changed: one German military move announced previously suspension of 5 brigade de-activation still stands; but their NATO aliles have pressured the Germans into sticking with their reserve call-up as originally notified (30,000 in March); demonstrators remain encamped around Soviet garrisons in eastern Germany.
 - Ethnic violence and demonstrations accompanied by renewed demands for independence have broken out in the Ukraine; some speculate that this eruption of domestic tensions, which seemed predictable (and preventable) earlier on, served as the catalyst for Corbachev's departure from power.
- · Southern Europe
 - Yugoslavian unity continues to deteriorate at an accelerating rate.
 - Both the Croats and Slovenes have just begun forming national militias, largely out of ethnic deserters from the Yugoslavian army.
 - That army is in disarray in the north but heavily involved in fighting Albanian guerrilias in Kosovo, control of which it looks like the Serbs are about to lose.
 - The Serbians, who control the government in Belgrade, are hard pressed to maintain control over what the government holds, much less deal effectively with Croatian and Siovenian separatists; they are desparately appealing for help to the U.S.S.R. and any other Warsaw Pact members who can help them soon.



Move V -- Red Team

- · Time is now February 4, 1994.
- The new ruling troika has decided that Yugoslavia shall not fall, like so many eastern European countries before it, into further disarray and dismemberment that would work to the West's advantage.
 - Like the U.S.S.R., Yugoslavia is a multi-national, multi-ethnic country with a communist heritage whose unity should be preserved in the face of resurgent nationalisms.
 - -the trolka is committed to preserving the U.S.S.R. by repressing the recent outbreak of separatism in the Ukraine and setting an example in doing so that will deter further such moves elsewhere in the future;
 - -support for the Serbs in Yugoslavia is consistent with this commitment, as well as a further example of the kind of national and international disorder that will no longer be tolerated;
 - -moreover, the trolka will no longer Ignore the Serbian military, who have been trained and equipped in the U.S.S.R. and are now pleading for help along with their government; we well not abandon them as we abandoned their East German counterparts to Western Influence several years ago.
 - In response to repeated requests for the legal, Serbian led government of Yugoslavia, therefore, the trolka has decided to intervene militarily:
 - -to backstop and help the Serbs regain control of the country and of events;
 - -to preempt and forestall any Western military support for the breakaway regions of Croatia and Slovenia;
 - -to welcome a reunited Yugoslavia into a reinvigorated and expanded Warsaw Pact once the intervention has been successfully undertaken.



Move V -- Red Team (Continued)

- · Prepare a plan for a limited Soviet Intervention in Yugoslavia.
- To avoid any preemptive moves by the U.S. or NATO, the operation must be a surprise, with maximum possible deception for as long as possible.
 - Employ the CFE and CSBM measures to maximum possible advantage even though in practice you may have to violate them to accomplish your mission.
 - Use the joint exercises planned with Romania, Hungary, and Bulgaria for March to mask the preparations for intervention.
- Assume a cooperative attitude on the part of those three countries, but not necessarily full knowledge of our intent.
 - At a minimum, even if their troops do not accompany ours in all cases, they will not oppose our intervention.
- Consider the possibility of military activities aimed against Germany in the north to distract from our true intent in the south.
 - The troiks believes that the German pressure on Poland is about to subside, thanks largely to the commanding military position we still maintain in eastern Germany -- which, ultimately, the troiks intends to maintain indefinitely by stopping the withdrawals.
 - In the circumstances, however, the trolka permits you to do whatever is necessary, short of actual combat, to distract attention from our activities in the south by preoccupying the NATO powers in the north -- including maintaining the schedule of troop withdrawals originally announced.
 - At the same time, be sure to allocate sufficient forces to the Ukraine to deal with the problems recently encountered there; military activities there should also divert attention from our Yugosiavian objectives.

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Scenario for Move V -- Blue Team (Northern Europe)

- The time is now March 1, 1994.
- The troiks running the U.S.S.R. at present consists of the heads of the Communist Party, the KGB, and the Defense Ministry. Gorbachev is reported to have suffered a stroke and to be hospitalized. The troiks serves as a collective presidency while he is incapacited.
 - Ethnic violence and demonstrations accompanied by renewed demands for independence have broken out in the Ukraine; some speculate that this eruption of domestic tensions, which seemed predictable (and preventable) earlier on, served as the catalyst for Gorbachev's sudden lilness (or, at least, for his sudden departure from the scene).
 - in responding to the uprising in the Ukraine, the trioka has already laid claim to Gorbachev's power to rule by decree, if necessary.
- The Americans and the French are reporting some successes in their efforts to get talks going between the Poles and the Germans on minority Issues.
 - The NATO aliles have also pressured the Germans into sticking with their reserve call-up as originally notified (30,000 in March).
 - Now that talks with the Poles seem imminent, the Germans are talking about "postponing" temporarily, versus "suspending," the transfer of 5 active brigades to the reserves.
 - German police have peacefully removed scores of demonstrators encamped around Soviet military garrisons in eastern Germany.
- In response to the relaxation of German pressures, the U.S.S.R. has announced an acceleration of its withdrawais from eastern Germany, moving up the departure times for units scheduled to leave in March and in May (none was scheduled for April) to February and March respectively.
 - -The Soviets are also reported to have turned down Pollsh requests to restation the departing forces in Poland.



Scenario for Move V -- Blue Team (Southern Europe)

- · Yugoslavian unity continues to deteriorate at an accelerating rate.
 - Both the Croats and Slovenes have begun forming national milities, largely out of ethnic deserters from the Yugoslavian army.
 - That army is in disarray in the north but heavily involved down south in fighting Albanian guerrillas in Kosovo, control of which appears to be up for grabs.
- The Serbians, who control the government in Belgrade, are hard pressed to hold onto what the government athi commands, much less deal effectively with Croatian and Slovenian separatists.
 - They are approaching desperation and appealing for help to the U.S.S.R. and any other Warsaw Pact members who can help them.
 - They think that the U.S. and NATO have already written them off and decided to make the best out of the breakup of Yugoslavia.
 - They have even taken the unprecedented step of applying to join the Warsaw Pact, in hopes that this will bring them tangible support and benefits almost immediately.
- The Soviet Union and other Pact members have yet to act formally on the Yugoslavian request for membership.
 - Since the Pact meeting in Warsaw in mid-January, however, they have been planning the joint exercises in support of Yugoslavia that were notified at the time of that meeting for the first week in March: one exercise aplace, in excess of 13,000 troops/300 tanks, in Hungary, Romania, and Bulgaria with Soviet participation (a regiment) in each case.
 - Soviet Deputy Foreign and Defense Ministers in Western Europe during mid-February to convey messages of reassurance regarding Soviet intentions toward NATO and Germany, have also stresses Soviet support for the sovereignty and integrity of Yugoslavia. They warn that Western recognition of breakaway republics can only be seen as a destablizing aid to insurrection and call for joint East-West mediation efforts to help resolve the issue.



Move V -- Blue Team

- · Assess the state-of-play in Northern Europe
 - Why is the new Soviet leadership accelerating the withdrawal of their forces from Germany?
 - -Because they view the Germans' threat as having ended once and for all (they think that NATO has now demonstrated its ability to control them)?
 - -Because they need these forces back home right away to deal with ethnic upheavals of the kind they are facing in the Ukraine?
 - -Because they need the forces back home so that they can dedicate other forces to helping Yugoslavia remain united?
 - How stable is the military situation for NATO during February and March in view of all the movement being undertaken by Soviet troops in Germany?
- Monitor and evaluate developments in Southern Europe
 - What are the Soviets and other Warsaw Pact members seeking to accomplish by holding joint exercises on Yuglavia's borders?
 - Should such exercises worry NATO? If not, way not; if so, what should NATO be doing in response to them?
 - What do you see as the Soviet Union's and the Warsaw Pact's capabilities and intentions with regard to Yugoslavia?



APPENDIX I

ORIGINAL RED MOVE V (FROM TEST GAME, MAY 3-9, 1990)

General Assessment:

In the opinion of the planning staff, Germany remains a much more serious threat to the security of the Soviet Union, despite its current more benign posture, than the fractious Yugoslavs. Military intervention in Yugoslavia is likely to cost us dearly with the West in political terms, and the redirection f resources away from the military has already had its effects, of course. Nonetheless, we have reoriented the primary concern of our planning from the north to the south in light of recent German political moves and the explicit orders of our superiors, the comrades in the troika.

Political-Military Strategy vs Germany:

In light of the success of our efforts to convince Germany to back down in its demands against Poland, we consider it prudent to tone down our rhetoric with regard to the German threat, especially since we need to seem as peaceable as possible if our deception efforts with respect to Yugoslavia are to be successful. We should see to it that rumors of Polish or Czech requests for restationing of Soviet forces in their territory are met with leaks from well-placed Soviet sources that the Soviet Union would never agree to such requests.

We should also announce that we are moving up by one month the departures of all remaining units from Germany. (This move will also give us a bulge in our transportation traffic that we should use in connection with the Yugoslavian intervention. See below.) Technically, this step might be seen to violate the CFE agreements, as we will be changing the calendar of military movements. Arguments that the movement of units out of eastern Germany more rapidly than initially defeats the intention of the CFE agreement will be difficult for the West to justify, however.

Otherwise, we should proceed as before with the announced exercise calendar and low-level readiness exercises, but we should be place a greater emphasis on training motorized rifle divisions in these exercises on the assumption that such units would be (marginally) better suited to eventual participation in the Yugoslavian conflict than tank divisions.

Political-Military Strategy with Respect to Yugoslavia

General Assessment:

The situation in Yugoslavia is obviously fraught with danger. We can only reach Yugoslavia through the territories of Hungary, Romania, and Bulgaria. We have no permanently stationed forces in those nations, and the long-term enthusiasm of their governments for our use of their territories is

uncertain. The current government of Yugoslavia is hardly in complete control. Slovenia and Croatia are the Yugoslavian territories closest to Italy, and Croatia is accessible from the Adriatic area in which the U.S. naval forces recently exercised. In addition, the mountainous terrain as well as the history of Yugoslavia make tenacious partisan warfare a probability—though perhaps we will have a chance to apply the lessons we learned in Afghanistan. The best of many difficult courses for the Soviet Union is to limit its intervention as much as possible, and to leave itself with a way to make a graceful exit as soon as possible.

Political Measures:

As part of our deception effort, we should continue our previous propoganda that Yugoslavia is a single, sovereign nation, and that Western recognition of breakaway republics can only be seen as a destabilizing aid to insurrection. We should indicate our continuing interest in mediation.

Even if military operations become necessary, we should also emphasize—and believe—that the prospects for a successful return to law and order in Yugoslavia are a function mainly of the success that the Serbs have in convincing Croatians, Slovenians, and Kosovites to return to the fold. We can help the Yugoslavians by giving the Serbs a freer hand in the south (Kosovo) and by protecting their borders, but we cannot solve their problems. The proximity of Slovenia and Croatia to Italy mean that we are unlikely to be able to help the Yugoslavians by calming the Croatians and Slovenians; to protect Yugoslavia's western borders against Western invasion, we must invade the very areas that harbor the non-Kosovos rebels.

We leave to our diplomatic colleagues the difficult choice of deciding when the rumors or reality of Yugoslavian requests for Soviet assistance should find their way into the press: if such requests are made known too soon, military surprise may suffer, while making such requests public too late will make them look like hastily erected window dressing on a unilateral Soviet decision to invade. In any event, once the intervention is judged sufficiently obvious or impending for publicity, our diplomatic efforts should be in accord with the overall strategy set forth below.

Once made public, there should be as much emphasis as possible placed on the desire of the legitimate Yugoslavian government to have limited, multilateral assistance from Hungary, Romania, Bulgaria, and the Soviet Union in maintaining internal order and in preventing unrequested crossings of its borders. The continuing support of RB&H is especially important to the success of the intervention; indeed, the intervention should probably not be attempted without a sound judgment that RB&H will support Soviet actions enthusiastically. The chief concern of RB&H for the moment is a flow of refugees from Yugoslavia into their countries, and we should structure our operations to meet those concerns.

Military Measures:

Summary: The overall military strategy of the intervention should have the following phases:

- Phase 1 (beginning March 1): Without entering Yugoslavia, seal Yugoslavia's borders with RH&B, using forces of RH&B and the Soviet Union.
- Phase 2 (no earlier than April 15): If necessary, airdrop Soviet airborne units into Yugoslavia to take control of Yugoslavian mountain passes along routes from Italy to Yugoslavia
- Phase 3 (no earlier than May 15): If necessary, deploy Soviet ground troops through Yugoslavia to prevent amphibious landings in Croatia.

We should move from Phase 1 to Phase 2 only if the Yugoslavian government appears to be losing ground in the south and our intervention is sincerely requested by the Serbians, and we believe Western intervention to be a real possiblity. We should move from Phase 2 to Phase 3 only if we believe a Western amphibious operation is in the offing.

In all phases, we should continue to supply the Serbian government with arms and advisors; at no stage do we envision joint operations involving conventional Soviet forces and the Serbs. We should leave the Serbs to do the actual fighting in the south, and should limit our missions in northern Yugoslavia during Phases 2 and 3 to defensive operations—securing our lines of communications and patrolling border areas—as much as possible. Securing our lines of communication may be difficult, however, given the mountainous terrain and Yugoslavian memories of World War II's partisan warfare.

We cannot at this time present plans for these operations in much detail, owing to a lack of sufficiently detailed maps of the relevant areas and to insufficient information about possible opposition. We note also that Phases 2 and 3, at least, are fraught with risk; in the face of a Western determination to enter Yugoslavia, our presence in Yugoslavia could lead to all-out war with a host of NATO nations. Nonetheless, we believe the plan presented here to be the best way to comply with our orders to plan for a limited Soviet intervention in Yugoslavia that would help the Serbs regain control of the country and "preempt" Western military support for Croatia and Slovenia.

Phase 1:

The overt goal of this phase is to assist RB&H in sealing their borders against Yugoslavian refugees. The covert goal is to deploy Soviet units to the Yugoslavian-Hungarian border in preparation for Phase 2, and to generate sufficient traffic volumes in the Carpathian MD to allow masking of later movements. This phase will also give us time to increase the readiness of airborne units, currently deployed outside of the CFE Zone 4, to be used in Phase 2.

The regiment and squadron already announced to participate in Bulgaria for the joint exercise should be moved through the Carpathian Military District (MD) into Sofia and then northwest to the Bulgarian-Yugoslavian border. (We did not name the particular unit before; our retrospective guess is a regiment of the 30 GMRD from the Odessa MD.) To emphasize our desire not to get involved in the south, we should be sure that no elements of the units operate any further south than Sofia. Here, and in Romania and Hungary, we should deploy with the host country forces toward the border and engage in border security missions—that is, heavy, broad—area patrolling. The units should actually undertake border security, though lethal force should be avoided at all costs. We should, however, paint the activities as training—we simply saw an opportunity to practice reconnaissance and patrolling skills in an area where there are actual persons trying to avoid the patrols.

The regiment and squadron already announced to participate in Romania for the joint exercise should be moved through the Carpathian MD, into Timisoara, and then west to the border. (We did not name the particular unit before; our retrospective guess is a regiment of the 84 MRD from the Carpathian MD.)

The regiment and squadron already announced to participate in Hungary for the joint exercise should be moved through the Carpathian MD, through Budapest, through Nagykanizsa, and to the border. (We did not name the particular unit before; our retrospective guess is a regiment of the 46 GTD from the Carpathian MD.)

In each case, the other three regiments belonging to the division of the unit already announced to participate in an exercise in one of the RB&H countries should also participate in a similar border security exercise with units of the relevant host country--e.g., all four regiments of the 46 GTD would be moved to Hungary, each participating in a separate exercise with Hungarian units. Each of the four joint exercises in each country should be under the 13,000-troop limit. They should occur in roughly the same area as the already-announced regiment's activities, but each regiment's exercise area should be separated from its neighboring regiment's exercise areas by at least a regimental frontage of open space. The division HQ and associated division-level units should also remain in the Soviet Union to bolster our claims that the exercises are separate from one another.

All of these regiments should pass through the Carpathian MD.

We should announce these additional exercises, emphasizing that they been undertaken at the invitation of the host countries and in order to improve stability in the Balkans and contain the Yugoslavian cauldron at its current borders.

It is our understanding that, because the relevant exercises are not notifiable, the area of the exercises is not a declared zone, and that we can therefore refuse any inspection requests by the Western powers to see those zones. We should refuse such requests. (Our previous policy of refusing 80 percent of all undeclared zone inspections should help us here; we can just be sure that the 80 percent includes these zones.)

We note, as should analysis by Soviets and others, that this threedivision force is clearly insufficient to take meaningful control of Yugoslavia. The Germans used more than two dozen divisions to occupy Yugoslavia--more than they kept in France for the Western "D-day" invasion-- and still couldn't maintain clear control of the entire territory. In the unlikely and quite sobering event that a full-scale Soviet invasion of Yugoslavia were deemed possible by our superiors, we recommend continuing this pattern of moving and exercising (by regiments) one division a month into each of the RB&H countries. Two of the divisions should come in the future from those units leaving eastern Germany, as those units will already have "pulled up stakes," as the Americans say. The third unit should come from MDs in the Soviet Union covered by the CFE agreement if our superiors judge such units unnecessary for internal security purposes; otherwise, our superiors will have to judge whether they wish to undertake the momentous step of violating the CFE force levels—not just the nonreductions provisions—by increasing the level of forces within the CFE Atlantic—to—the—Urals zone.

In further preparation for the possibility of needing to implement Phase 3, we should call an alert for the entire 3d GTD in the Carpathian MD. The unit should essentially remain in garrison, except that—as per our previous practice—one regiment should extend the alert into a week—long exercise. We should announce the alert to the West shortly after we have begun the accompanying activity, and we should allow inspections thereof if requested. (We assume that the CFE regime is such that inspectors of this exercise will not be able to obtain information about our other activities in the Carpathian MD, especially since we are essentially limiting the inspectable forces to their garrison areas; if allowing this inspection would allow the West to learn more about other activities in this MD, we should not hold this alert/exercise.)

We should also call up a reserve division each in the Carpathian, Odessa, and Belorussian MDs. Three divisions should be under the 40,000-troop reserve-mobilization limit, above which we would need to notify under the CFE/Stockholm treaties. The activity in the Carpathian should add further to the "noise" in the Carpathian MD already generated by the movement through it of three divisions in connection with the border security exercises.

Into that noise in the Carpathian MD, we are already scheduled to send two divisions (the NAC and the 12 GTD) from eastern Germany; by virtue of announcing the 1-month acceleration of our movement from eastern Germany in connection with the backing off of the Germans, we are also removing the Torago MRD from eastern Germany, and that unit is also already scheduled to redeploy to the Carpathians; there are also the three divisions going through the Carpathians on their way to RB&H; and finally there is the reservedivision callup. (Fortunately, the rail network in the Carpathian MD is among our densest.) In preparation for Phase 3, we should redeploy one regiment from each of the three divisions withdrawing from eastern Germany through the "noisy" Carpathian MD and into Hungary. During their transport (once they have left the declared zone) and upon their arrival in Hungary, all efforts at deception and maskirovka should be undertaken. The units should feel free to choose the particulars of their redeployment areas-forests, ravines, general isolation, etc.--accordingly. The units need not maintain battalion integrity, but can be scattered about. They should, however, deploy into the areas being used by the units already exercising in Hungary; this should increase the difficulty of picking them out. As mentioned above, these areas are undeclared zones and requests to inspect

them should be denied. Our intelligence services should make every effort to determine whether the West is successful in detecting our redeployments.

In preparation for the possibility of executing Phase 2, we should also begin more intensive training of our airborne units behind the Urals. We should attempt to deceive Western intelligence services into thinking that the higher ranks of the airborne service requested these exercises on their own initiative during the Germans' recent aggressive phase, that the old leadership granted the request owing to its fear of the Germans, and that the exercises have not been cancelled because of a combination of bureaucratic inertia and a belief that the new leadership is more receptive generally to a well-prepared military.

Phase 2.

If it becomes necessary to undertake Phase 2, we believe a violation of the CFE/Stockholm agreements is necessary for military success. The involved airborne units are quite likely to number more than 3,000, which triggers the notification requirement. Unfortunately, the passes involved are likely to be difficult to take if we are opposed, and we therefore cannot allow Slovenian partisans advance warning (along with the West) of our efforts. We therefore recommend violating the CFE notification provisions if Phase 2 should prove necessary.

A question arises as to whether we should withdraw sufficient units from the CFE ATTU zone so as to make the total within the CFE limits even after the airborne units have entered the ATTU zone. We think that the public reaction to the Soviet airborne operation will not be much affected by whether the Soviet Union also has a few thousand more troops in the ATTU zone than is permitted, but it would not be difficult to withdraw 7 GTD out of the Ural MD and into the westernmost portion of the Siberian MD after the airdrop has occurred. This movement would place us within the CFE force limits.

Phase 3:

We envision a multidivision force moving from Hungary across Slovenia and into the Croatian area to prevent a Western amphibious invasion of Croatia. We could undertake this operation without violating any CFE provisions. It might be useful to undertake a covering exercise in preparation for the invasion, or perhaps even as an intimidatory measure if Phase 3 need not be implemented. In this case, we will need to notify the exercise 42 days in advance as falling between the 13,000- and 40,000-troop limits. The operation itself might well exceed 40,000 troops, but we think it unlikely that this violation will cause the Soviet Union much extra difficulty in light of the fact that it will need at that time to deal with the consequences of having moved more than 40,000 troops onto the territory of another nation.

APPENDIX J

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GLOSSARY

ABBREVIATIONS, ACRONYMS, AND SHORT TERMS

ACV armored combat vehicle

ATTU Atlantic to the Urals

CAA US Army Concepts Analysis Agency

CBM Confidence Building Measure

CFE Conventional Armed Forces in Europe

CFAW Contingency Force Analysis Wargame

CSBM Confidence and Security Building Measure

CSS combat service support

DVA Distinguished Visiting Analyst

FTX field training exercise

GDR German Democratic Republic

K thousand

MD military district

MVD Soviet Ministry for Internal Affairs

NATO North Atlantic Treaty Organization

NoREDs nonreduction measures

NTM national technical means

RH&B Romania, Hungary, and Bulgaria

TLE treaty-limited equipment

USSR Union of Soviet Socialistic Republics